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(54) **LEARNING GAMIFICATION AND SAFETY CONTROL APPLICATION FOR MOBILE DEVICES**

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(*) Notice: This patent is subject to a terminal disclaimer.

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H04W 12/08 (2021.01)
H04W 8/22 (2009.01)
(Continued)

(52) **U.S. Cl.**
CPC ***H04W 8/22*** (2013.01); ***G06Q 10/109*** (2013.01); ***G09B 5/00*** (2013.01); ***G09B 7/00*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC H04W 12/08; H04W 4/02; H04W 4/90; H04W 12/06; H04W 4/027; H04W 48/04; H04W 88/02; H04W 4/046; H04W 4/12; H04W 8/22; H04W 4/023; H04W 8/14; H04W 48/16; H04W 4/021; H04W 4/16; H04W 12/04; H04W 12/12; H04W 24/08; H04W 4/00; H04W 4/50; H04W 84/045; H04W 84/18; H04W 88/08; H04W 8/245; H04W 48/18; H04W 4/80; H04W 64/00; H04W 76/12; H04W 8/183; H04W 28/18; H04W 40/005; H04W 4/60; H04W 4/70; H04W 52/0209; H04W 52/22; H04W 52/281; H04W 52/30; H04W 52/367;
(Continued)

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(Continued)

Primary Examiner — Minh Dieu Nguyen

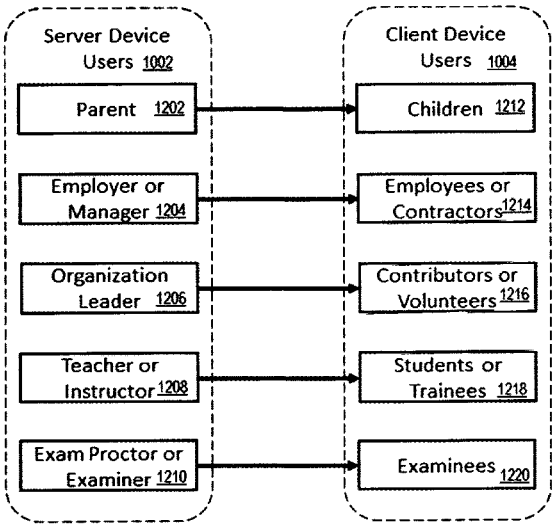
(74) *Attorney, Agent, or Firm* — Bishop, Diehl & Lee Ltd.

(57) **ABSTRACT**

An application for mobile devices that enables a server device to control multiple client devices with numerous features and capabilities relevant to both server and client devices, such as learning gamification and safety controls. Running on popular operating systems, this application is compatible with other mobile applications and provides a mechanism for the server device to override internal controls on one or more client devices with ability to configure access controls based on gamification features using parameters that include but not limited to applications, programs, goals, and rewards. This application includes safety and security control features that enables the server device to remotely monitor and control one or more client devices.

5 Claims, 9 Drawing Sheets

Examples of User Scenarios for Learning Gamification and Safety Control Application



(51) **Int. Cl.**

H04W 12/37	(2021.01)
H04M 1/72463	(2021.01)
H04M 1/72427	(2021.01)
G06Q 10/10	(2012.01)
G09B 5/00	(2006.01)
G09B 7/00	(2006.01)
H04L 29/06	(2006.01)
H04L 29/08	(2006.01)
H04M 3/42	(2006.01)
G06Q 30/02	(2012.01)
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H04W 88/02	(2009.01)

(52) **U.S. Cl.**

CPC ***H04L 63/105*** (2013.01); ***H04L 63/20*** (2013.01); ***H04L 65/1069*** (2013.01); ***H04L 65/4069*** (2013.01); ***H04L 67/125*** (2013.01); ***H04L 67/26*** (2013.01); ***H04M 1/72427*** (2021.01); ***H04M 1/72463*** (2021.01); ***H04M 3/42374*** (2013.01); ***H04W 12/08*** (2013.01); ***H04W 12/37*** (2021.01); *G06Q 30/02* (2013.01); *H04M 3/38* (2013.01); *H04M 3/42144* (2013.01); *H04W 88/02* (2013.01)

(58) **Field of Classification Search**

CPC H04W 56/0015; H04W 76/10; H04W 84/042; H04W 88/06; H04W 12/10; H04W 36/0094; H04W 40/08; H04W 40/12; H04W 48/20; H04W 4/029; H04W 4/06; H04W 52/0229; H04W 52/0235; H04W 52/0251; H04W 52/0274; H04W 60/00; H04W 68/00; H04W 72/042; H04W 72/085; H04W 72/1273; H04W 76/14; H04W 76/15; H04W 76/25; H04W 76/27; H04W 76/28; H04W 76/50; H04W 88/00; H04W 8/18; H04W 8/24; H04W 92/00; H04W 12/02; H04W 24/00; H04W 24/10; H04W 28/0236; H04W 28/06; H04W 28/08; H04W 36/32; H04W 4/18; H04W 4/20; H04W 4/24; H04W 52/50; H04W 72/02; H04W 72/04; H04W 72/0406; H04W 72/0413; H04W 72/0446; H04W 74/004; H04W 74/006; H04W 74/008; H04W 74/0833; H04W 76/11; H04W 76/16; H04W 88/04; H04W 8/005; H04W 8/04; H04W 84/12; H04W 88/021; H04M 1/72577; H04M 1/72527; H04M 1/67; H04M 3/436; H04M 19/04; H04M 1/66; H04M 1/72522; H04M 1/72552; H04M 2250/12; H04M 2250/22; H04M 3/38; H04M 3/42178; H04M 3/53308; H04M 3/54; H04M 11/04; H04M 15/80; H04M 15/8044; H04M 15/8055; H04M 15/8271; H04M 15/883; H04M 1/0254; H04M 1/03; H04M 1/04; H04M 1/21; H04M 1/22; H04M 1/57; H04M 1/6075; H04M 1/663; H04M 1/665; H04M 1/72519; H04M 1/72536; H04M 1/72544; H04M 1/72547; H04M 1/72566; H04M 1/72575; H04M 1/72583; H04M 2203/1091; H04M 2203/2011; H04M 2203/2044; H04M 2203/2072; H04M 2203/2077; H04M 2203/654; H04M 2207/206; H04M 2242/14; H04M 2250/02; H04M 2250/52; H04M 3/42; H04M 3/42017; H04M 3/42229; H04M 3/42314; H04M 3/4234; H04M 3/42374; H04M 3/428; H04M 3/46; H04M 7/006; H04M 7/127; H04L 63/083; H04L 63/101; H04L 63/0861; H04L 67/04; H04L 67/10; H04L 67/12; H04L 12/2803; H04L 63/102; H04L 63/107; H04L 63/126; H04L 12/6418; H04L 63/08; H04L 63/104; H04L 63/1441; H04L 63/145; H04L 67/125; H04L 1/1861; H04L 26/2601; H04L 45/026; H04L 5/0007; H04L 5/0044; H04L 5/0057; H04L 5/0094; H04L 5/0096; H04L 63/0272; H04L 63/062; H04L 63/0823; H04L 63/108; H04L 65/4069; H04L 67/26; H04L 67/306; H04L 67/34; H04L 12/5692; H04L 1/16; H04L 29/06; H04L 41/0893; H04L 41/22; H04L 43/0835; H04L 43/0858; H04L 43/10; H04L 47/25; H04L 51/12; H04L 51/38; H04L 61/10; H04L 61/1511; H04L 63/0227; H04L 63/12; H04L 63/1433; H04L 63/20; H04L 65/1006; H04L 65/104; H04L 65/1056; H04L 65/1069; H04L 65/80; H04L 67/02; H04L 67/025; H04L 67/16; H04L 67/18; H04L 67/20; H04L 67/2828; H04L 69/329

See application file for complete search history.

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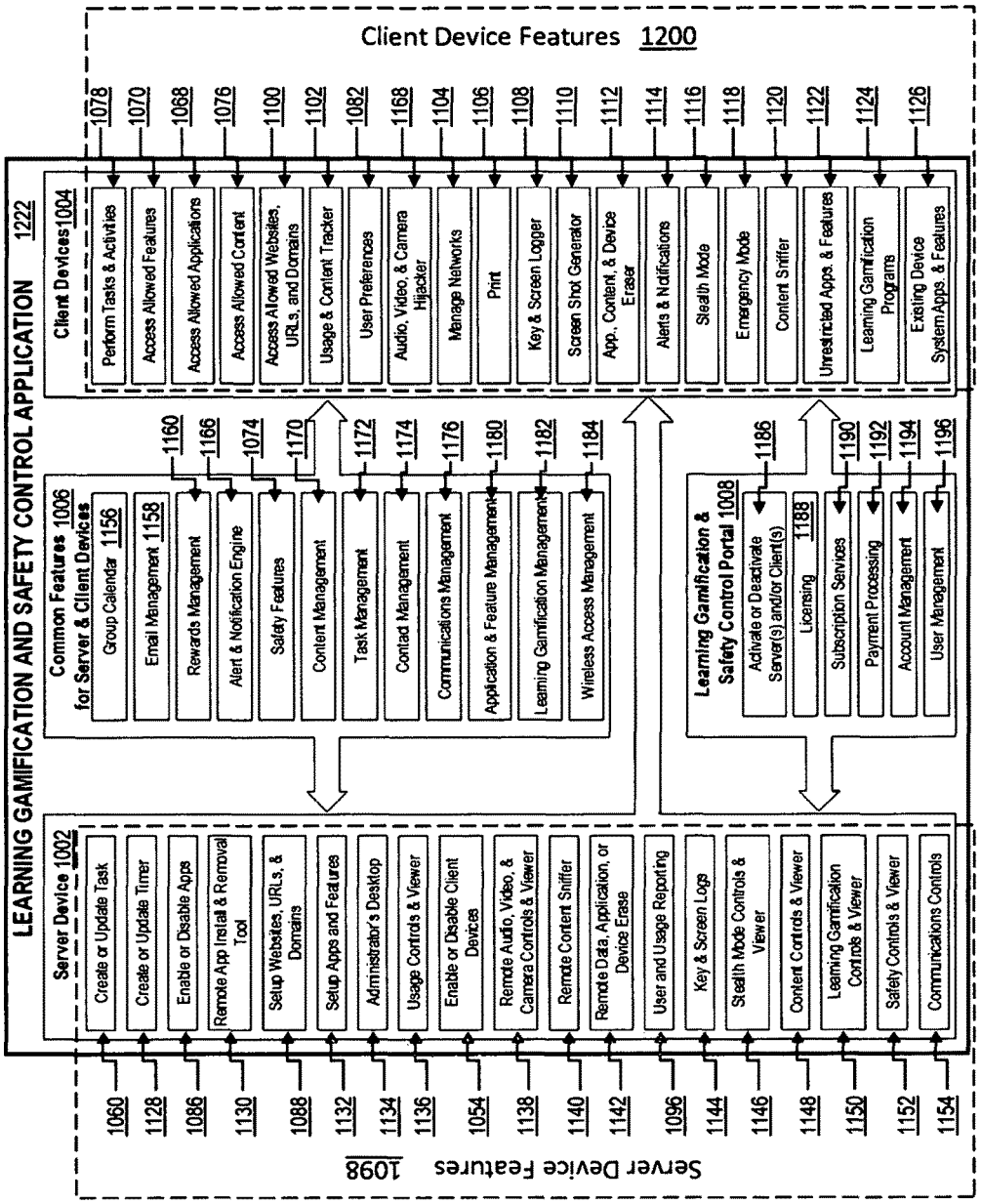
Client Device Features 1200
LEARNING GAMIFICATION AND SAFETY CONTROL APPLICATION 1222
Client Devices 1004
Perform Tasks & Activities
Access Allowed Features
Access Allowed Applications
Access Allowed Content
Access Allowed Websites, URLs, and Domains
Usage & Content Tracker
User Preferences
Audio, Video, & Camera Hijacker
Manage Networks
Print
Key & Screen Logger
Screen Shot Generator
App., Content, & Device Eraser
Alerts & Notifications
Stealth Mode
Emergency Mode
Content Sniffer
Unrestricted Apps. & Features
Learning Gamification Programs
Existing Device System Apps. & Features
Common Features 1006 for Server & Client Devices
Group Calendar 1156
Email Management 1158
Rewards Management
Alert & Notification Engine
Safety Features
Content Management
Task Management
Contact Management
Communications Management
Application & Feature Management
Learning Gamification Management
Wireless Access Management
Learning Gamification & Safety Control Portal 1008
Activate or Deactivate Server(s) and/or Client(s)
Licensing 1188
Subscription Services
Payment Processing
Account Management
User Management
Server Device 1002
Create or Update Task
Create or Update Timer
Enable or Disable Apps
Remote App Install & Removal Tool
Setup Websites, URLs, & Domains
Setup Apps and Features
Administrator's Desktop
Usage Controls & Viewer
Enable or Disable Client Devices
Remote Audio, Video, & Camera Controls & Viewer
Remote Content Sniffer
Remote Data, Application, or Device Erase
User and Usage Reporting
Key & Screen Logs
Stealth Mode Controls & Viewer
Content Controls & Viewer
Learning Gamification Controls & Viewer
Safety Controls & Viewer
Communications Controls
Server Device Features 1098

FIG. 1

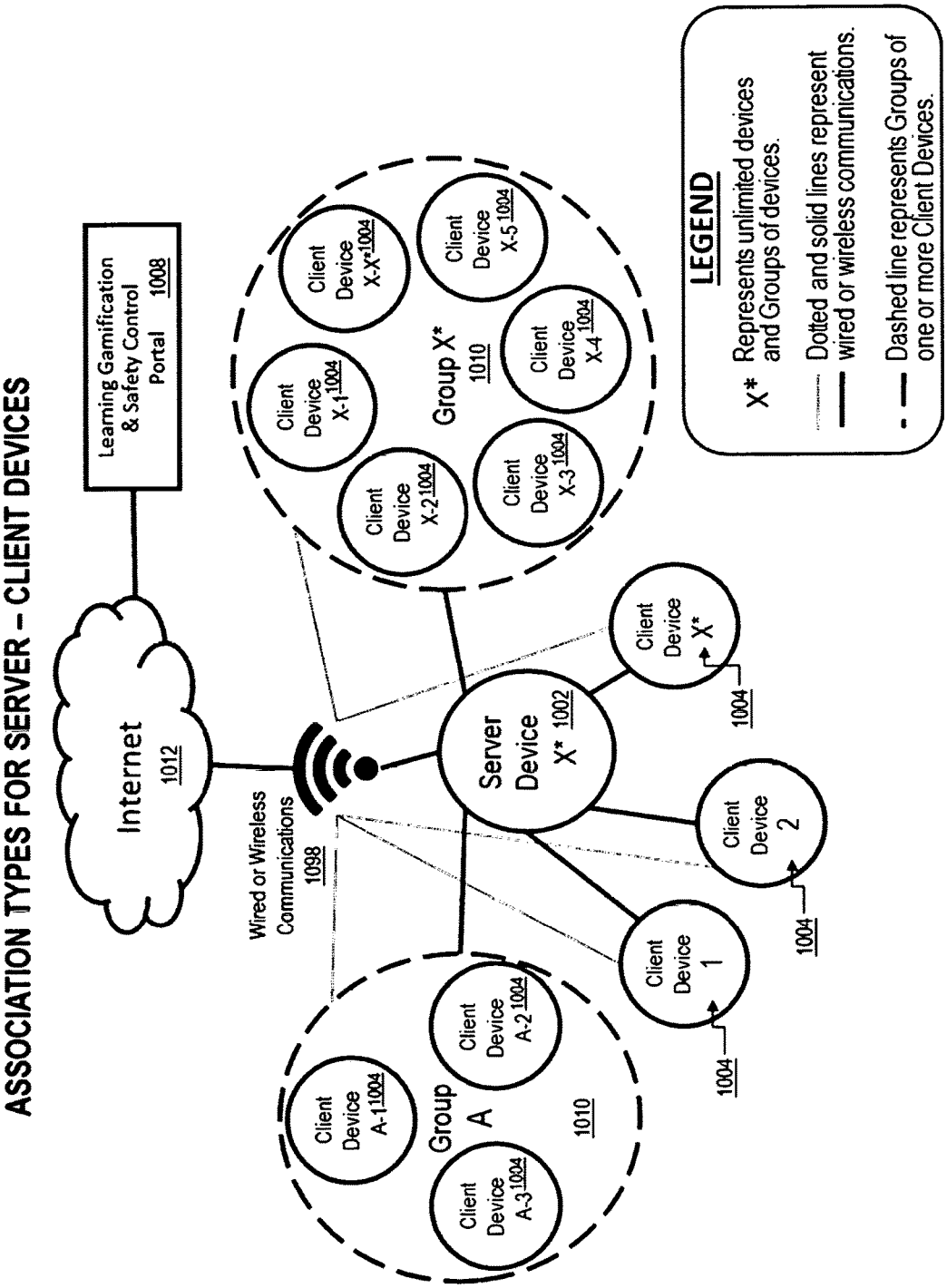
ASSOCIATION TYPES FOR SERVER – CLIENT DEVICES
Learning Gamification & Safety Control Portal 1008
Internet 1012
Wired or Wireless Communications 1098
Server Device X* 1002
Group A 1010
Client Device A-1 1004
Client Device A-2 1004
Client Device A-3 1004
Group X* 1010
Client Device X-1 1004
Client Device X-2 1004
Client Device X-3 1004
Client Device X-4 1004
Client Device X-5 1004
Client Device X-X* 1004
Client Device X* 1004
Client Device 1 1004
Client Device 2 1004
LEGEND
X* Represents unlimited devices and Groups of devices.
Dotted and solid lines represent wired or wireless communications.
Dashed line represents Groups of one or more Client Devices.

FIG. 2

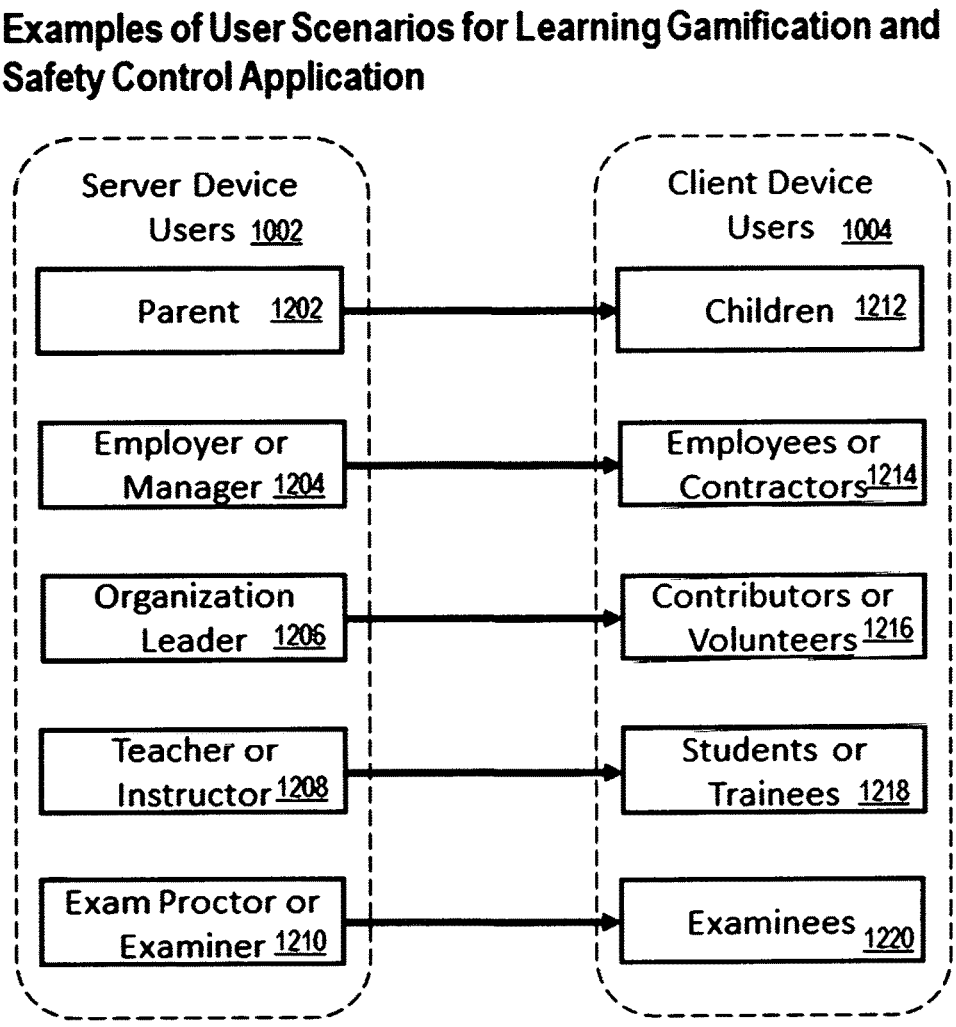
Examples of User Scenarios for Learning Gamification and Safety Control Application
Server Device Users 1002
Client Device Users 1004
Parent 1202
Children 1212
Employer or Manager 1204
Employees or Contractors 1214
Organization Leader 1206
Contributors or Volunteers 1216
Teacher or Instructor 1208
Students or Trainees 1218
Exam Proctor or Examiner 1210
Examinees 1220

FIG. 3

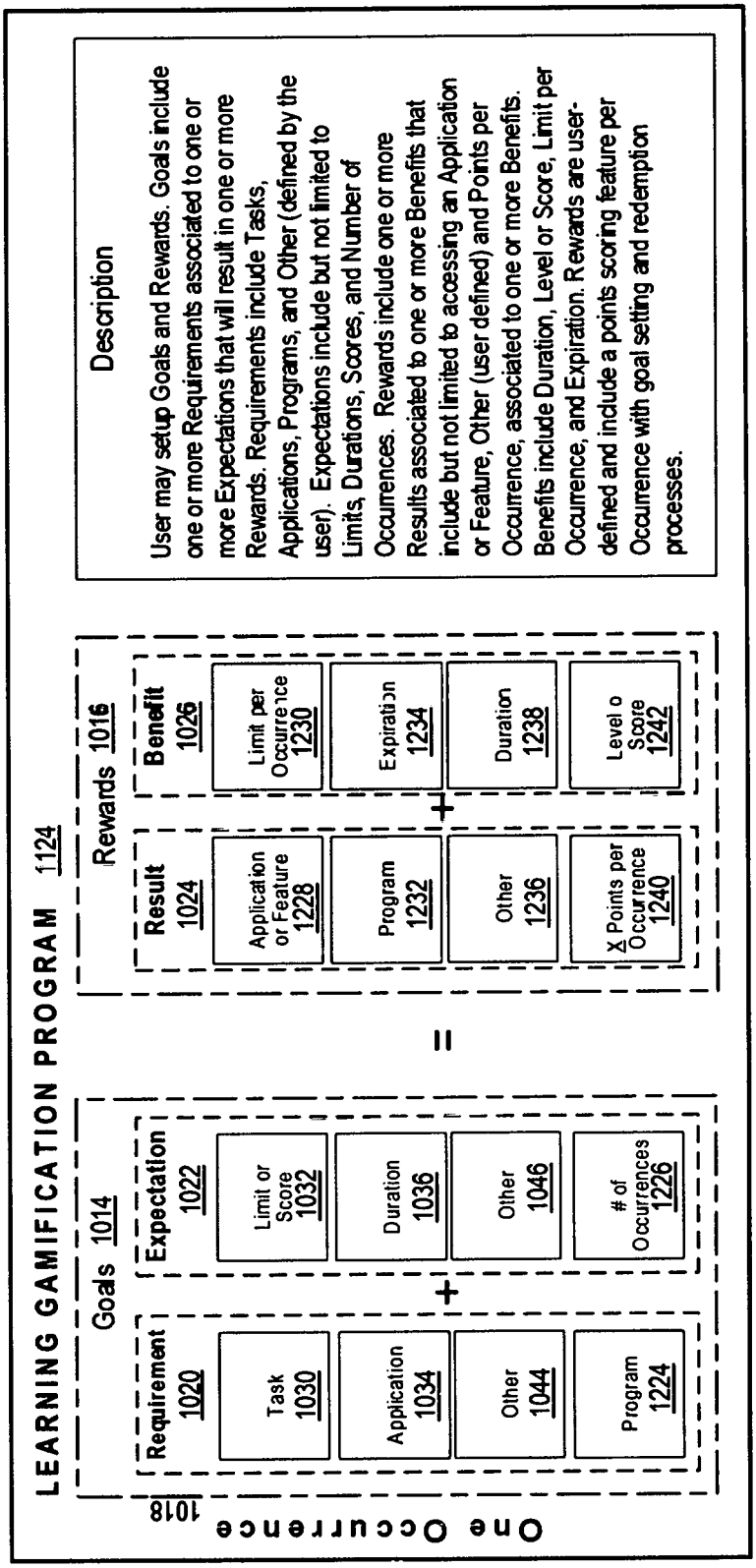
LEARNING GAMIFICATION PROGRAM 1124
One Occurrence 1018
Goals 1014
Requirement 1020
Task 1030
Application 1034
Other 1044
Program 1224
Expectation 1022
Limit or Score 1032
Duration 1036
Other 1046
# of Occurrences 1226
+
=
Rewards 1016
Result 1024
Application or Feature 1228
Program 1232
Other 1236
X Points per Occurrence 1240
Benefit 1026
Limit per Occurrence 1230
Expiration 1234
Duration 1238
Level o Score 1242
+
Description
User may setup Goals and Rewards. Goals include one or more Requirements associated to one or more Expectations that will result in one or more Rewards. Requirements include Tasks, Applications, Programs, and Other (defined by the user). Expectations include but not limited to Limits, Durations, Scores, and Number of Occurrences. Rewards include one or more Results associated to one or more Benefits that include but not limited to accessing an Application or Feature, Other (user defined) and Points per Occurrence, associated to one or more Benefits. Benefits include Duration, Level or Score, Limit per Occurrence, and Expiration. Rewards are user-defined and include a points scoring feature per Occurrence with goal setting and redemption processes.

FIG. 4

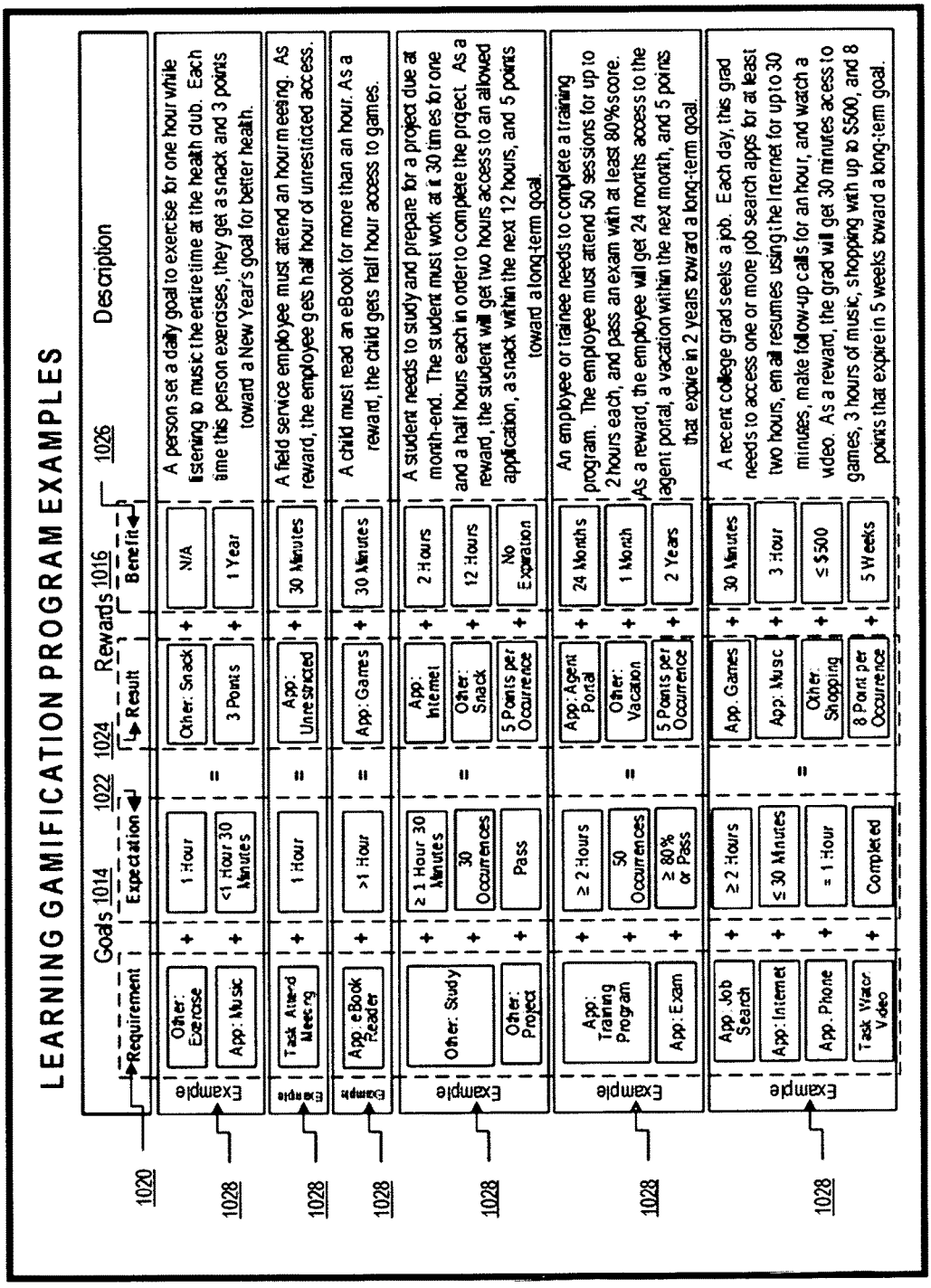
LEARNING GAMIFICATION PROGRAM EXAMPLES
1020
Goals 1014
1022
1024
Rewards 1016
1026
Description
Requirement
Expectation
Result
Benefit
1028
Example
Other: Exercise
App: Music
1 Hour
<1 Hour 30 Minutes
Other: Snack
3 Points
N/A
1 Year
A person set a daily goal to exercise for one hour while listening to music the entire time at the health club. Each time this person exercises, they get a snack and 3 points toward a New Year's goal for better health.
Example
Task: Attend Meeting
1 Hour
App: Unrestricted
30 Minutes
A field service employee must attend an hour meeting. As reward, the employee gets half hour of unrestricted access.
Example
App: eBook Reader
>1 Hour
App: Games
30 Minutes
A child must read an eBook for more than an hour. As a reward, the child gets half hour access to games.
Example
Other: Study
Other: Project
≥ 1 Hour 30 Minutes
30 Occurrences
Pass
App: Internet
Other: Snack
5 Points per Occurrence
2 Hours
12 Hours
No Expiration
A student needs to study and prepare for a project due at month-end. The student must work at it 30 times for one and a half hours each in order to complete the project. As a reward, the student will get two hours access to an allowed application, a snack within the next 12 hours, and 5 points toward a long-term goal.
Example
App: Training Program
App: Exam
≥ 2 Hours
50 Occurrences
≥ 80% or Pass
App: Agent Portal
Other: Vacation
5 Points per Occurrence
24 Months
1 Month
2 Years
An employee or trainee needs to complete a training program. The employee must attend 50 sessions for up to 2 hours each, and pass an exam with at least 80% score. As a reward, the employee will get 24 months access to the agent portal, a vacation within the next month, and 5 points that expire in 2 years toward a long-term goal.
Example
App: Job Search
App: Internet
App: Phone
Task: Watch Video
≥ 2 Hours
≤ 30 Minutes
= 1 Hour
Completed
App: Games
App: Music
Other: Shopping
8 Point per Occurrence
30 Minutes
3 Hour
≤ $500
5 Weeks
A recent college grad seeks a job. Each day, this grad needs to access one or more job search apps for at least two hours, email resumes using the Internet for up to 30 minutes, make follow-up calls for an hour, and watch a video. As a reward, the grad will get 30 minutes access to games, 3 hours of music, shopping with up to $500, and 8 points that expire in 5 weeks toward a long-term goal.

FIG. 5

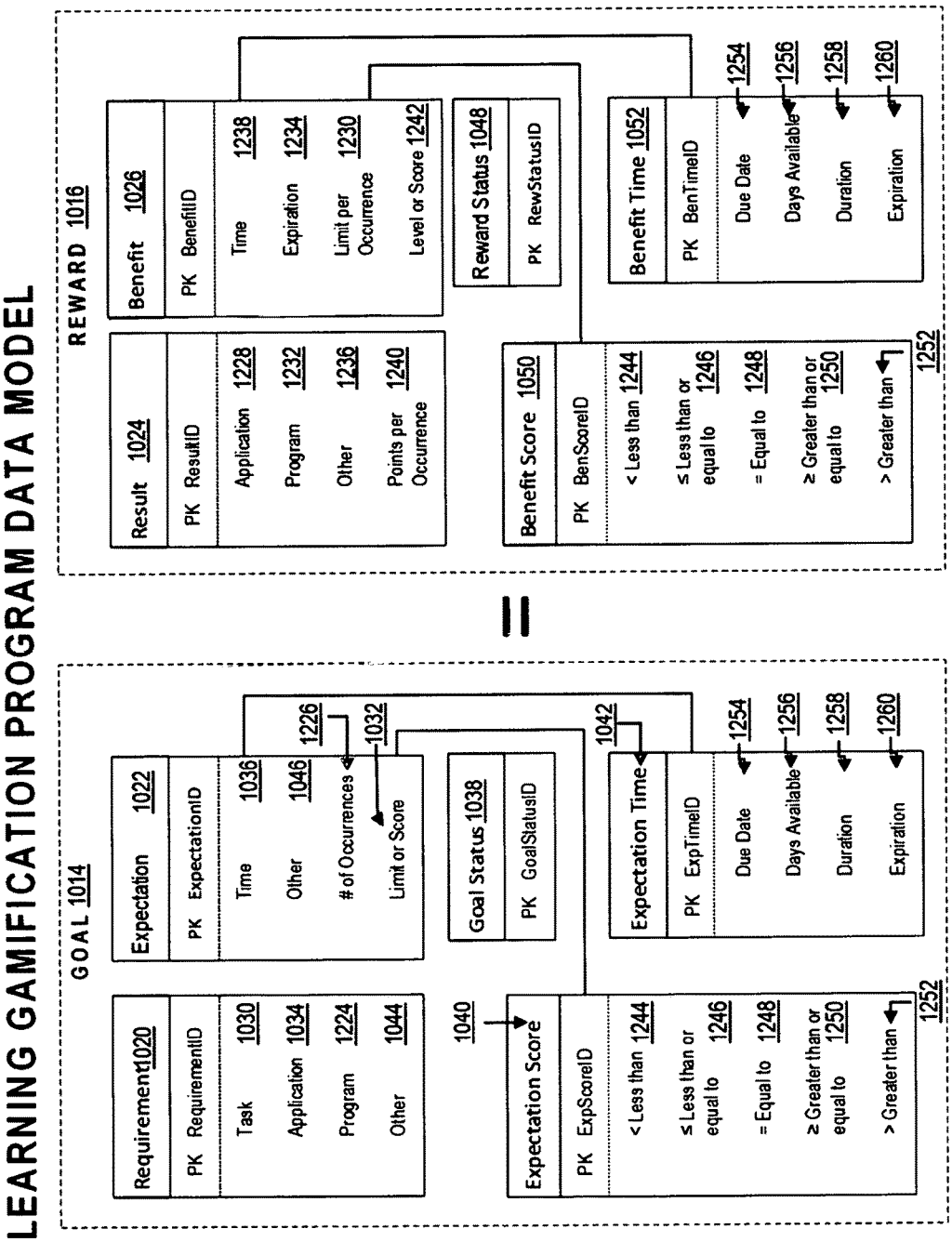
LEARNING GAMIFICATION PROGRAM DATA MODEL
GOAL 1014
Requirement 1020
PK RequirementID
Task 1030
Application 1034
Program 1224
Other 1044
Expectation 1022
PK ExpectationID
Time 1036
Other 1046
# of Occurrences 1226
Limit or Score 1032
Goal Status 1038
PK GoalStatusID
1040
Expectation Score
PK ExpScoreID
< Less than 1244
≤ Less than or equal to 1246
= Equal to 1248
≥ Greater than or equal to 1250
> Greater than 1252
1042
Expectation Time
PK ExpTimeID
Due Date 1254
Days Available 1256
Duration 1258
Expiration 1260
=
REWARD 1016
Result 1024
PK ResultID
Application 1228
Program 1232
Other 1236
Points per Occurrence 1240
Benefit 1026
PK BenefitID
Time 1238
Expiration 1234
Limit per Occurrence 1230
Level or Score 1242
Reward Status 1048
PK RewStatusID
Benefit Score 1050
PK BenScoreID
< Less than 1244
≤ Less than or equal to 1246
= Equal to 1248
≥ Greater than or equal to 1250
> Greater than 1252
Benefit Time 1052
PK BenTimeID
Due Date 1254
Days Available 1256
Duration 1258
Expiration 1260

FIG. 6

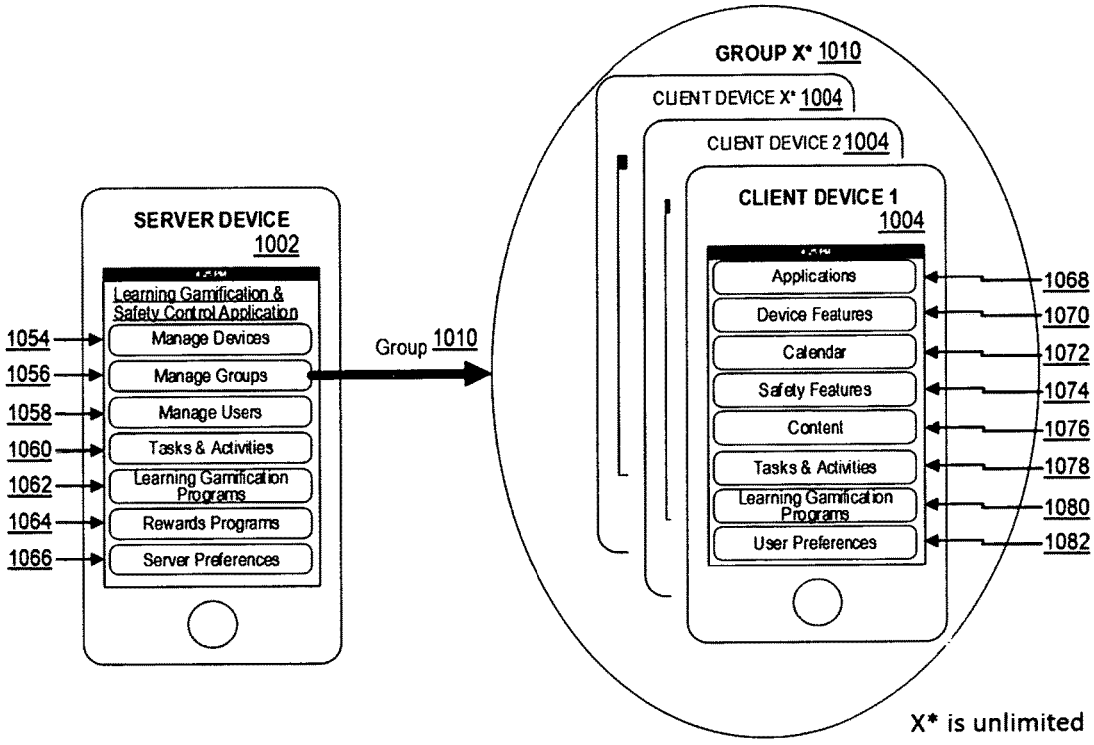
SERVER DEVICE
1002
Learning Gamification & Safety Control Application
Manage Devices
Manage Groups
Manage Users
Tasks & Activities
Learning Gamification Programs
Rewards Programs
Server Preferences
1054
1056
1058
1060
1062
1064
1066
Group 1010
GROUP X* 1010
CLIENT DEVICE X* 1004
CLIENT DEVICE 2 1004
CLIENT DEVICE 1
1004
Applications
Device Features
Calendar
Safety Features
Content
Tasks & Activities
Learning Gamification Programs
User Preferences
1068
1070
1072
1074
1076
1078
1080
1082
X* is unlimited

FIG. 7

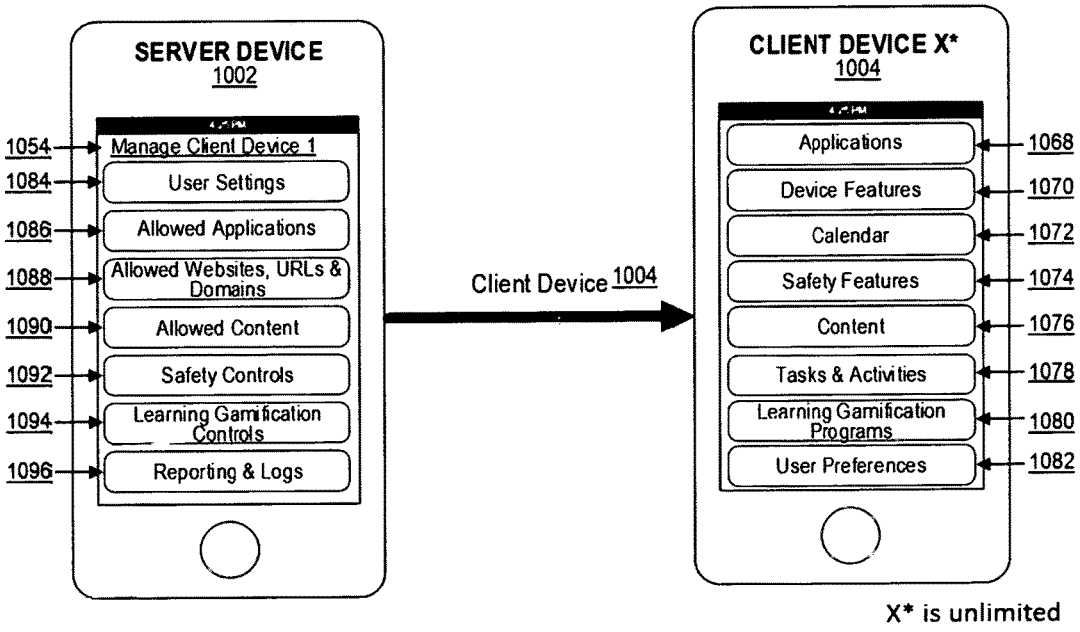
SERVER DEVICE
1002
Manage Client Device 1
User Settings
Allowed Applications
Allowed Websites, URLs & Domains
Allowed Content
Safety Controls
Learning Gamification Controls
Reporting & Logs
1054
1084
1086
1088
1090
1092
1094
1096
Client Device 1004
CLIENT DEVICE X*
1004
Applications
Device Features
Calendar
Safety Features
Content
Tasks & Activities
Learning Gamification Programs
User Preferences
1068
1070
1072
1074
1076
1078
1080
1082
X* is unlimited

FIG. 8

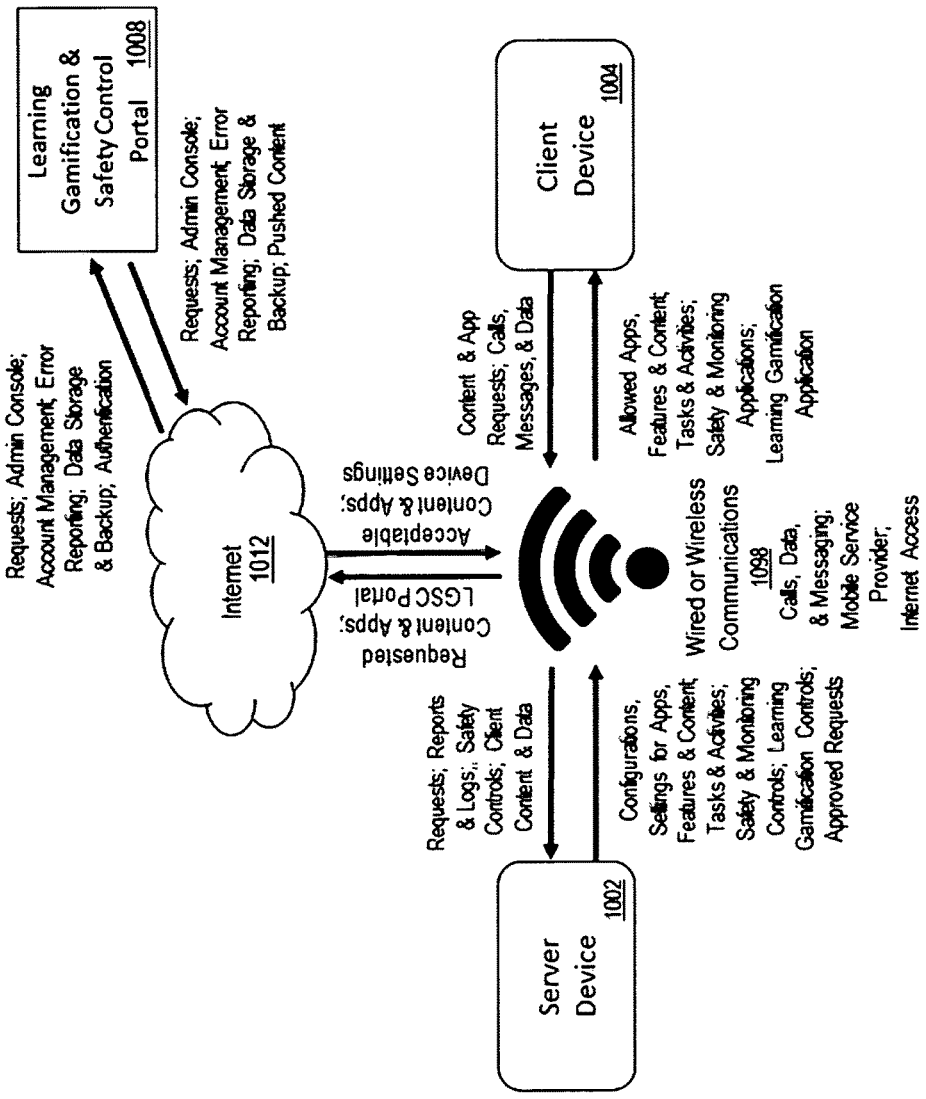
HIGH-LEVEL ARCHITECTURE
Learning Gamification & Safety Control Portal 1008
Requests; Admin Console; Account Management; Error Reporting; Data Storage & Backup; Authentication
Requests; Admin Console; Account Management; Error Reporting; Data Storage & Backup; Pushed Content
Internet 1012
Acceptable Content & Apps; Device Settings
Requested Content & Apps; LGSC Portal
Client Device 1004
Content & App Requests; Calls, Messages, & Data
Allowed Apps, Features & Content; Tasks & Activities; Safety & Monitoring Applications; Learning Gamification Application
Wired or Wireless Communications 1098
Calls, Data, & Messaging; Mobile Service Provider; Internet Access
Server Device 1002
Requests; Reports & Logs; Safety Controls; Client Content & Data
Configurations, Settings for Apps, Features & Content; Tasks & Activities; Safety & Monitoring Controls; Learning Gamification Controls; Approved Requests

FIG. 9

LEARNING GAMIFICATION AND SAFETY CONTROL APPLICATION FOR MOBILE DEVICES

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue; a claim printed with strikethrough indicates that the claim was canceled, disclaimed, or held invalid by a prior post-patent action or proceeding.

BACKGROUND

With the proliferation of technology making mobile devices relatively inexpensive to own and affordable for parents, employers, organizations, and others to provide one or more client devices to their dependents, employees, contractors, or others. By enabling a server device with the ability to closely monitor and control usage of one or more client devices while encouraging and rewarding each user (dependent, employee, contractor, or other) for performing certain activities and tasks, along with reinforcement and rewards for achieving such criteria while performing the activities and tasks.

The Learning Gamification and Safety Control Application delivers parents, managers and others with peace of mind regarding their children, employees', or others' safety and security while utilizing a mobile device to browse the Internet, and access applications and content. With feature-rich user access and usage controls, parents and managers benefit from a user-friendly administrative interface while users operate their devices seamlessly. The Learning Gamification and Safety Control Application provides a mechanism for managing and mitigating foreseeable risks while using a mobile computing device and provides important safety and communication tools.

Dependents, employees, contractors, and others are often provided with a mobile device for entertainment or because their parent or employer wants quick access to call their dependent, employee or contractor. Resulting from the wide range of mobile device applications, holders of mobile devices often lose focus, poorly manage their time, and lose productivity due to playing games, watching videos, and searching the Internet, among other things. Examples include forgotten appointments, failure to communicate with others, failure to meet deadlines, failure to adequately prepare for important events or exams. This solution provides parents, employers, organizations, and others with the ability to effectively deploy one or more mobile devices with the Learning Gamification and Safety Control Application to enable a server device to configure, monitor, and control one or more client device features, applications, and content.

SUMMARY

Dependents, employees and contractors operating a client device will benefit from the task-oriented features that will so help improve learning; shared calendar and integrated timer that strengthens time management and concentration; advanced communications preferences with group policies for prioritizing and managing interactions and interruptions; enhanced security capabilities with device tracking for quicker response and one-touch device locator; safety dashboard for overseeing and preventing inappropriate content and usage; alert and notification engine to automatically communicate with either server or one or more client mobile devices based on system-defined and user-defined criteria.

In embodiments, a server device and one or more client devices include but not limited to mobile phones, tablets, and handheld or mobile computing devices with communications capabilities, ideal for members of one or more groups that may include but are not limited to family members, employees of a business, or members of an organization.

In embodiments, a server device includes a user interface for monitoring and managing each of one or more client devices. The server device provides an interface for establishing and configuring access and control for each of one or more client devices.

In embodiments, a client device includes a controller for managing, monitoring, and configuring user access to each application, feature, and content installed on the associated client device. Each client device is controlled by one or more authorized and associated server devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Embodiments of Learning Gamification and Safety Control Application are described within and with reference to the following Figures. These same Figures are referenced throughout to such details that include but are not limited to features and components, capabilities, functionality and processes;

FIG. **1** illustrates the features available with the Learning Gamification and Safety Control. Application based on either the Server Device or Client Devices. These features include common features available to both Server Device and Client Device, along with features enabled by the Learning Gamification and Safety Control Portal;

FIG. **2** illustrates the concept of hub and spoke mobile device computing with the Server Device controlling one or more Client Devices and groups of Client Devices. The Server Device communicates with the Client Devices using a Learning Gamification and Safety Control Portal accessible via wireless communications and the Internet;

FIG. **3** illustrates examples of user scenarios for Learning Gamification and Safety Control. Application;

FIG. **4** illustrates the functionality of the Learning Gamification Program. The Learning. Gamification Program enables users to setup one or more Goals that, upon being established, allow the user to setup Requirements with one or more Expectations that result in one or more Rewards;

FIG. **5** illustrates the Learning Gamification Program Examples. These examples include but are not limited to those shown;

FIG. **6** illustrates the Learning Gamification Program Data Model. This model illustrates the critical field attributes necessary to configure one or more Goals with Requirements, Expectations, Scores and Times, associated to one or more Rewards with Results, Limits, Scores, and Times;

FIG. **7** illustrates an example of how the Server Device controls and manages related features and capabilities installed on one or more Client Devices;

FIG. **8** illustrates an example of how the Server Device controls and manages related features and capabilities installed on a Group of one or more Client Devices, whereas the number of Groups and number of Client Devices are unlimited by the Learning Gamification and Safety Control Application; and

FIG. **9** illustrates the high-level architecture for the Server Device and Client Device utilizing Wired or Wireless Com-

munications to access the Internet and Learning Gamification and Safety Control Portal.

DETAILED DESCRIPTION

Overview

The Learning Gamification and Safety Control Application features and components are described herein. In some embodiments, processes and techniques involving server and one or more client devices are described to share features and content. A server device may be configured to control one or more client devices. Based on parameters set by the server device, sharing of features and content may be enabled and accessible, enabled and restricted, or disabled to one or more associated client devices.

In addition, the common features for server and client devices with the Learning Gamification and Safety Control Application installed include direct two-way communications between the devices; group calendars; group task lists; one or more group policy alerts and notifications that may be associated to a task, meeting, email, appointment, timer or other activity; emergency mode with features that include user-defined programmable personal identification numbers (PINs) with preset actions and processes; contact manager application for the server device user to manage contacts on one or more client devices; audio and video telephone; text and SMS messaging.

In addition, when the Learning Gamification and Safety Control Application is installed on both server and one or more client devices, the server device will authenticate, configure, manage, and control the features, components, applications, and content accessible or non-accessible, enabled or disabled on each of one or more client devices. The server device with the Learning Gamification and Safety Control Application installed features, components, and applications on the client mobile device, such as but not limited to tasks, timers, application controller, URL controller, usage reporting, usage controller, administrator desktop, key and screen logger, remote application manager, mobile device manager, camera controller, screen shot generator, remote wipe, and network manager.

In addition, when the Learning Gamification and Safety Control Application is installed on both server and one or more client devices, the client devices will authenticate, provision, and grant full access into MI installed features, components, applications, and content to the server device while maintaining the communications services provided to each mobile device by their respective telephone service providers.

In addition, with the Learning Gamification and Safety Control Application, the features and components may employ a subscription service that provides a limited use license to access value-added services and features that seamlessly integrate and enhance the applications. Such value-added services and features include but are not limited to content sniffer that searches and quarantines inappropriate content (examples include images, videos, music, texts, social media, email, games, chat, etc.; payment processing for collecting subscription and licensing fees from customers; mobile device activation for validating license and subscription; account management for maintaining contact information and other relevant details; targeted advertising by customer segment.

FIG. **1** illustrates the features available with the Learning Gamification and Safety Control Application on the Server Device **1002** or Client Devices **1004**. These features include Common Features **1006** available to both Server Device **1002** and Client Device **1004**, along with the Learning Gamification and Safety Control Portal Features **1008**.

FIG. **1** further illustrates the Server Device Features **1098** include but not limited to: Create or Update Task **1060**; Create or Update Timer **1128**; Enable or Disable Applications **1086**; Remote Application Install and Removal Tool **1130**; Setup Websites, URLs and Domains **1088**; Setup Applications and Features **1132**; Administrator's Desktop **1134**; Usage Controls & Viewer **1136**; Enable or Disable Client Devices **1054**; Remote Audio, Video, and Camera Controls and Viewer **1138**; Remote Content Sniffer **1140**; Remote Data, Application, and Device Erase **1142**; User and Usage Reporting **1096**; Key and Screen Logs **1144**; Stealth Mode Controls and Viewer **1146**; Content Controls and Viewer **1148**; Learning Gamification Controls and Viewer **1150**; Safety Controls and Viewer **1152**; and Communications Controls **1154**. The Server Device **1002** will control the features available and accessible on one or more Client Devices **1004**.

FIG. **1** further illustrates the Client Device Features **1200** include but are not limited to: Perform Tasks and Activities **1078**; Access Allowed Features **1070**; Access Allowed Applications **1068**; Access Allowed Content **1076**; Access Allowed Websites, URLs, and Domains **1100**; Usage and Content Tracker **1102**; User Preferences **1082**; Audio, Video, and Camera Hijacker **1168**; Manage Networks **1104**; Print **1106**; Key and Screen Logger **1108**; Screen Shot Generator **1110**; Application, Content, and Device Eraser **1112**; Alerts and Notifications **1114**; Stealth Mode **1116**; Emergency Mode **1118**; Content Sniffer **1120**; Unrestricted Applications and Features **1122**; Learning Gamification Program **1124**; Existing Device System Applications and Features **1126**.

FIG. **1** further illustrates the Common Features **1006** for Server Device **1002** and Client Devices **1004** include but are not limited to: Group Calendar **1156**; Email Management **1158**; Rewards Management **1160**; Alert and Notification Engine **1166**; Safety Features **1074**; Content Management **1170**; Task Management **1172**; Contact Management **1174**; Communications Management **1176**; Application and Feature Management **1180**; Learning Gamification Management **1182**; and Wireless Access Management **1184**.

FIG. **1** further illustrates the Learning Gamification and Safety Control Portal **1008** features include but are not limited to: Activate or Deactivate Server(s) and/or Client(s) **1186**; Licensing **1188**; Subscription Services **1190**; Payment Processing **1192**; Account Management **1194**; and User Management **1196**.

FIG. **2** illustrates the Association Types for Server-Client Devices. The concept of hub and spoke mobile device computing with the Server Device **1002** controlling one or more Client Devices **1004** and/or one or more Groups **1010** of Client Devices **1004**. The Server Device **1002** communicates with the Client Devices **1004** and Groups **1010** of Client Devices **1002** using the Learning Gamification and Safety Control Portal **1008** accessible via wired or wireless communications **1098** and the Internet **1012**. This diagram illustrates the concept that one or more Server Devices **1002** control one or more Client Devices **1004** and Groups **1010** of Client Devices **1004**. There is no limit on the number of Server Devices **1002**, Client Devices **1004**, or Groups **1010** of Client Devices **1004** that associate together. A Server Device **1002** may not control another Server Device **1002**.

FIG. **3** illustrates Examples of User Scenarios for the Learning Gamification and Safety Control Application **1222**. Examples of the types of users of Server Devices **1002** and Client Devices **1004** include but not limited to: Parents **1202** with Children **1212**; Employers and Managers **1204** with

Employees or Contractors **1214**; Organization Leaders **1206** with Contributors or Volunteers **1216**; Teachers and Instructors **1208** with Students and Trainees **1218**; and Exam Proctors and Examiners **1210** with Examinees **1220**.

FIG. **4** illustrates the Learning Gamification Program **1124**. The Learning Gamification Program **1124** shows how a Server Device **1002** user may setup one or more Goals **1014** to earn one or rime Rewards **1016**. Goals **1014** are established using one or more Requirements **1020** with one or more Expectations **1022** that result in one or more Rewards **1016**. The program is designed following a flexible architecture that allows the user to specify Requirements **1020** that comprises a Task **1030**, Application **1034**, Program **1224**, and Other Requirement **1044**. Requirement Tasks **1030** include Activities, Emails, Meetings, Appointments, or other actions or records that can be maintained using existing legacy applications, such as but not limited to: calendar **1156**, **1072**; alarm clock, phone, camera, messaging, mail, audio and video player, or other existing device system applications and features **1126** designed to operate seamlessly with the mobile computing device. Application **1034** includes each of one or more non-system applications installed on the mobile computing device. Program **1224** represents the ability for one or more Learning Gamification Programs **1124** to be subordinate to another Learning Gamification Program **1224**, where completing one or more Learning Gamification Programs **1224** is required to successfully complete another Learning Gamification Program **1224** that packages all the subordinate programs into a higher-level program. Other **1044** includes any action that is completed without using the Client Device **1004**. Expectation **1022** includes but not limited to one or more Limit or Score **1032**, Duration **1036**, Other **1046**, and Number of Occurrences **1226** associated with a Goal **1014**. When One Occurrence **1018** of the Learning Gamification Program **1224** occurs, where one or more Requirements **1020** and one or more Expectations **1022** are completed, one or more Rewards **1016** may be granted to the Client Device **1004** user. One or more Rewards **1016** are associated to one or more Goals **1014** and defined with one or more Results **1024** associated to one or more Benefits **1026**. A Result **1024** includes but is not limited to accessing one or more Applications **1228** and Features **1232**, Other **1236** (a user-defined field), and Points per Occurrence **1240**, associated to one or more Benefits **1026** that include but not limited to ability to set a Limit per Occurrence **1230**, Expiration **1234**, Duration **1238**, and Level or Score **1242**. Rewards **1016** include short-term Rewards **1016**, such as accessing games and applications on the Client Device **1004** or exercising to lose weight, and long-term Rewards **1016**, such as exercising to earn a savory dessert, or completing an online certification program to qualify for a promotion.

FIG. **5** illustrates the Learning Gamification Program Examples. A variety of Examples **1028** with narratives are shown about how the Learning Gamification Program **1124** may be utilized. These Examples **1028** include but are not limited to those shown in FIG. **5**.

FIG. **6** illustrates the Learning Gamification Program Data Model. This model illustrates the critical field attributes necessary to configure one or more Goals **1014** with Requirements **1020**, Expectations **1022**, Expectation Scores **1040** and Expectation Times **1042**, associated to one or more Rewards **1016** with Results **1024**, Benefits **1026**, Benefit Scores **1050**, and Benefit Times **1052**.

FIG. **6** further illustrates the Requirements **1020** include one or more of the following, but not limited to a Task **1030** or Activity, Application **1034**, Program **1224**, or Other **1044**. Based on the selected Requirement **1020**, the applicable Expectations **1022** will be dynamically visible, such as but not limited to Duration **1036**, Other **1046**, Number of Occurrences **1226**, Limit or Score **1032**, and Goal Status **1038**. The user may set one or more Expectations **1022** to each Requirement **1020**. Based on the selected Expectations **1022**, the applicable Expectation Score **1040** and Expectation Time **1042** fields will be dynamically visible for the user to enter values. The Goal Status **1038** field will be automatically populated.

FIG. **6** further illustrates the Rewards **1016** include one or more of the following, but not limited to a Task **1030** or Activity, Application **1034**, Program **1224**, or Other **1044**. Based on the selected Result **1024**, the applicable Benefits **1026** will be dynamically visible, such as but not limited to Duration **1238**, Expiration **1234**, Limit per Occurrence **1230**, and Level or Score **1242**, and Reward Status **1048**. The user may set one or more Benefits **1026** to each Result **1024**. Based on the selected Benefits **1026**, the applicable Benefit Score **1050** and Benefit Time **1052** fields will be dynamically visible for the user to enter values. The Reward Status **1048** field will be automatically populated.

FIG. **7** illustrates an example of Server Device Controls and Client Device Capabilities. This diagram shows how the Server Device **1002** controls and manages related features and capabilities installed on a Group **1010** of one or more Client Devices **1004**, whereas the number of Groups **1010** and number of Client Devices **1004** are unlimited by the Learning Gamification and Safety Control Application. The Server Device **1002** controls and manages related features and capabilities installed on one or more Groups **1010** of one or more Client Devices **1004**. Similar to FIG. **6**, the Server Device **1002** will establish the association to one or more Groups **1010** of one or more Client Devices **1004** and provide a user interface for managing the capabilities and features accessible to each Group **1010** of one or more Client Devices **1004**. The Server Device **1002** manages one or more Groups **1010** of Client Devices **1004** with configurations that include but are not limited to: Manage Devices **1054**; Manage Groups **1056**; Manage Users **1058**; Tasks and Activities **1060**; Learning Gamification Programs **1062**, **1150**; Rewards Programs **1064**; and Server Preferences **1066**.

FIG. **7** further illustrates that each Client Device **1004** within a Group **1010** of Client Devices **1004** will individually authenticate and associate to the Server Device **1002** and provide a user interface for utilizing the enabled and allowed capabilities and features. The Client Device **1004** enabled and allowed capabilities and features include but not limited to: Applications **1068**; Device Features **1070**; Calendar **1072**; Safety Features **1074**; Content **1076**; Tasks and Activities **1078**; Learning Gamification Programs **1062**, **1080**; and User Preferences **1082**.

FIG. **8** illustrates an example of Server Device Controls and Client Device Capabilities. This diagram shows how the Server Device **1002** controls and manages related features and capabilities installed on one or more Client Devices **1004**, or Groups **1010** of Client Devices **1004**. The Server Device **1002** will establish the association to one or more Client Devices **1004** and provide a user interface for managing the capabilities and features accessible to the Client Devices **1004**. The Server Device **1002** allows the user to Manage a Client Device **1054**, **1004** with configurations that include but not limited to: User Settings **1084**; Allowed Applications **1068**, **1086**; Allowed Websites, URLs, and

Domains **1088**; Allowed Content **1076**, **1090**; Safety Controls **1092**; Learning Gamification Controls **1094**; and Reporting and Logs **1096**.

FIG. **8** further illustrates the Client Devices **1004** will authenticate and associate to the Server. Device **1002** and provide a user interface for utilizing the enabled and allowed capabilities and features. The Client Device **1004** enabled and allowed capabilities and features include but are not limited to: Applications **1068**; Device Features **1070**; Calendar **1072**; Safety Features **1074**; Tasks and Activities **1078**; Learning Gamification Program **1080**, **1124**; and User Preferences **1082**.

FIG. **9** illustrates the High-Level Architecture. FIG. **9** illustrates how the Server Device **1002** and Client Device **1004** utilize Wired and Wireless Communications **1098** to access the Internet **1012** and Learning Gamification and Safety Control Portal **1008**. The Server Device **1002** communicates with the Client Devices **1004** using the existing wireless communications hardware and software installed on the computing device to send and receive various instructions, commands, applications, and content to one or more Client Devices **1004** or Groups **1010** of Client Devices **1004**. Utilizing the Wired and Wireless Communications **1098** to access the Internet **1012**, the Server Device **1002** and Client Devices **1004** automatically update with the relevant applications, content, features, and capabilities installed and configured as enabled and/or allowed by the Server Device **1002**.

FIG. **9** further illustrates that the Server Device **1002** interacts with the Client Device(s) **1004** or Groups **1010** of Client Devices **1004**, whether individually or in a Group **1010**, and Learning Gamification and Safety Control Portal **1008** using the Wired and Wireless Communications **1098** features and capabilities to transmit data that includes but not limited to: Configurations; Settings for Applications, Features, and Content; Tasks and Activities **1060**, **1078**; Safety and Monitoring Controls and Settings, Learning Gamification Controls and Settings **1094**; and Approved Requests; Allowed Applications, Features, and Content; Safety and Monitoring Applications; and Learning Gamification Application.

FIG. **9** further illustrates that the Client Devices **1004** interacts with the Server Device **1002** and Learning Gamification and Safety Control Portal **1008** using the Wired and Wireless Communications **1098** features and capabilities to transmit data that includes but not limited to: Content Requests **1090**, **1076**; Application Requests **1086**, **1068**; Device Features **1070** (includes but not limited to phone calling, text and SMS messaging, video calling, image and video viewers, contact manager, calendar, video player and other device features pre-installed by the device manufacturer and intended for the specific device); Safety Features **1074** (includes but not limited to Emergency Mode **1118**, device locator, parental controls, user and usage reporting; camera, flashlight, and other device features pre-installed by the device manufacturer and intended for the specific device) **1070**; Reports and Logs **1096**; Safety Controls **1092**; Client Content and Data **1076**, **1090**.

FIG. **9** further illustrates that the Wired and Wireless Communications **1098** features and capabilities provide the Server Device **1002**, Client Devices **1004** and Groups **1010** of Client Devices **1004** with access to the Internet **1012** and the Learning Gamification and Safety Control Portal **1008**. The Wired and Wireless Communications **1098** include capabilities to answer incoming and complete outgoing audio and video phone calls, transmit data, and respond to and create outgoing messages using a mobile service provider.

FIG. **9** further illustrates the Learning Gamification and Safety Control Portal **1008** provides the Server Device **1002**, Client Devices **1004** and Groups **1010** of Client Devices **1004** with features and capabilities that operate using data that includes but not limited to: Requested Content; Requested Applications; Administrator Console; Account Management; Error Reporting; Data Storage; Device Backup; Authentication; Pushed Content, Acceptable Content; Acceptable Applications; and Device Settings.

The invention claimed is:

[1. A method for enabling a server device to control at least one client device, the method comprising the steps of:

providing a server device having a control application loaded thereon and a user interface, wherein the user interface enables the server device to control one or more associated client devices via the control application;

installing a control application via the user interface to each of the one or more associated client devices controllable by the server device;

connecting the server device and each of the one or more associated client devices to a wireless network;

providing direct bi-directional communication between the server device and each of the one or more associated client devices via the wireless network, wherein the direct bi-directional communication allows the control application of the server device to manage application configurations and settings of each associated client device;

controlling the one or more client devices by performing at least one of the following steps:

managing each of the one or more associated client devices using the server device, wherein the step of managing comprises at least one of the steps of:

creating and editing calendar events;

creating, editing, and updating tasks;

creating and updating a timer for measuring days and time with timer functionality;

setting and assigning user-defined requirements and user-defined expectations with timer functionality;

creating one or more timer activities, wherein the timer activities involve one or more requirements and one or more expectations that include one or more mobile applications or tasks with pre-defined expectations corresponding to one or more rewards;

configuring allowed and disallowed mobile applications based on settings that include age appropriate content, category, rating, and content type;

configuring allowed and disallowed content based on settings that include age appropriate content, category, rating, and content type;

enabling and disabling mobile applications based on age appropriate content, category, rating, and content type;

enabling and disabling access and control;

controlling access to mobile applications based on settings established by the server device user that include age appropriate content, category, rating, and content type;

configuring allowed and disallowed URLs based on settings that include age appropriate content, category, rating and content type;

receiving, viewing and resetting usage history;

remotely installing and removing mobile applications;

remotely triggering an erase feature of selected applications or data;

remotely deleting all data and applications;

remotely configuring and controlling, enabling and disabling wireless network access;

remotely configuring and controlling, enabling and disabling a key and screen logger application;

remotely configuring and controlling, enabling and disabling an existing camera application;

remotely configuring and controlling, enabling and disabling, an existing screenshot application;

sending computerized instructions from the server device to the one or more associated client devices that enables instant audio or video communications between the server device and the one or more client devices;

controlling an ability for the server device user to create, edit, or delete contact records;

controlling an ability for the server device to disable or password protect a delete function;

creating alerts and notifications and associating the alert or notification to at least one of a task, calendar event, and timer activity;

initiating emergency calls and activating an emergency mode by pressing a user-defined sequence of numbers, referred to as a personal identification number; and

initiating a device locator feature.]

2. The method as recited in claim **[1]** *6*, further comprising the steps of:

managing the server device and each of the one or more associated client device settings using the server device and a web-based administrator portal; and

offering monitoring, support, and administrative services via a web-based administrator portal, for a fee.

3. A method as recited in claim **[1]** *6*, further comprising *at least one of* the **[**step**]** *following steps* of:

enabling the server device user to control and monitor the features and usage of each of the one or more client devices;

enabling the server device user to configure settings, features, and usage of each of the one or more client devices;

enabling the server device user to create, edit, and view tasks and calendar activities, events, and records on each of the one or more client devices;

enabling each of the one or more client device users to perform each of one or more tasks, activities, events, or records created and assigned to each respective client device;

enabling each of the one or more client device users to run, pause, and complete one or more requirements and expectations created and assigned to each respective client device;

enabling each of the one or more client device users to access each of one or more allowed mobile applications, websites, URLs, content, or features based on the configurations and settings defined by the server device;

enabling each of the one or more client device users to operate, play, or view each of the one or more allowed mobile applications, websites, URLs content, or features based on the configurations and settings defined by the server device;

enabling the server device to access, monitor, and view usage history for each of the one or more client devices;

enabling the server device to access, capture, transmit, and erase audio, video, and images from each of the one or more client devices to the server device or other pre-defined location;

enabling the server device to access, capture, transmit, and erase report logs created by the key and screen logger application from each of the one or more client devices;

enabling the server device to access, capture and transmit audio, video, and images to the server device using the camera application from each of the one or more client devices;

enabling the server device to access, capture, transmit, and erase audio, video, and images to the server device using the screenshot application from each of the one or more client devices;

enabling the server device to take control of each of the one or more client devices by disabling an on/off switch, volume, screen, and other buttons and switches built into the device without powering a screen, similar to turning off the device, for each of the one or more client devices;

enabling the server device to erase all or selected data or applications, or delete all data and applications on each of the one or more client devices;

enabling the server device to create, edit, or delete contact records on each of the one or more client devices; *and*

enabling the server device to create, edit, and view emails for one or more email accounts using the existing email application on each device for each of the one or more client devices.

4. A method as recited in claim **[1]** *6*, further comprising the step of associating a server device with the one or more client devices to access a password protected administrative interface for at least one of the steps of:

creating and maintaining a customer account utilizing account management functionality;

creating and maintaining a profile utilizing profile management functionality for each client device user and the server device user;

creating and maintaining a purchase and payment history;

activating or deactivating the server device or the one or more client devices;

allowing the server device to create, change, or delete a masked password that controls each of the one or more client devices;

allowing each *of the one or more* client device to access the password protected administrative interface if the user enters the correct password, as defined and controlled by the server device;

entering and updating a unique license key issued for each server device and client device, as necessary to enable and operate the control application;

accessing a purchase history for the server device and each of the one or more client devices;

accessing each of the one or more client device usage history reports or logs with date and time stamps and details on applications accessed, time duration by application, URL's accessed, time duration by URL, tasks completed, time to complete tasks, incomplete tasks, texts and text history, phone call history, emails and email history, instant messaging and message history, video and image history;

allowing an account holder to view, enter, and delete credit or debit card information and process payments for licensing server devices and client devices to operate the Control Application;

allowing an account holder to create, edit, and delete each of the one or more groups of devices;

allowing an account holder to create, edit, and delete each of the one or more server device users;

allowing an account holder to assign and un-assign one or more device groups to each of the one or more server device users;

allowing the server device user to create, edit, and delete each of the one or more client devices users;

allowing the server device user assigned to a device group to assign and un-assign each of the one or more client devices to device groups;

allowing the one or more server device users to assign and un-assign one or more client devices to each of the one or more client device users, respectively;

allowing the server device user to create, edit, and delete one or more timers with one or more user-defined requirements, expectations, and rewards for each of the one or more client devices;

allowing the server device user to designate one or more applications as allowed or disallowed, and assign one or more requirements, expectations, and rewards to each allowed application for each of the one or more client devices;

allowing the server device user to designate one or more Internet websites, URLs, or domains as allowed or disallowed and assign one or more requirements, expectations, and rewards to each allowed website, URL, or domain for each of the one or more client devices;

allowing the server device user to enable and disable each of the one or more client devices based on a user-defined programmable schedule;

allowing the server device user to configure and trigger a data erase feature on each of the one or more client devices to erase the entire device or one or more user-defined applications or databases, or other content installed on the client device;

allowing the server device user to track and locate each of the one or more client devices;

allowing the server device to install one or more mobile applications on each of the one or more client devices;

allowing the server and client devices to communicate using any Internet-accessible access point or wireless service;

allowing the server device to enable or disable each of the one or more client devices;

allowing the server device to send one or more emergency notifications, alerts, and messages to each of the one or more client devices;

allowing each client device to send one or more emergency notifications, alerts, and messages to one or more server devices;

allowing the server device to setup notifications, alerts and messages for the server and client devices; and

allowing the server and client devices to access and utilize the telephone and text features for emergency purposes without restrictions.

5. A method as recited in claim **[1]** *6*, further comprising the step of allowing the server device and the one or more client devices to integrate with peripheral devices attached to a computer network, local computer, or the device using a device data cable or existing wireless communication features.

6. A method for enabling a server device to control one or more client devices, the method comprising the steps of:

providing a server control application for loading onto the server device, the server control application having a user interface which enables control of the one or more client devices each having a client control application loaded thereon:

preventing uninstallation of the client control application by the one or more client devices based on parameters set by the server device;

providing bi-directional connectivity of the server and the one or more client devices to a wireless network;

allowing the server device management of the application configurations and settings on the one or more client devices via the client control application;

wherein, the server device manages application configurations and settings of the one or more client devices by performing at least one of the following steps:

creating and editing calendar events;

creating, editing, and updating tasks;

creating and updating a timer for measuring days and time with timer functionality;

setting and assigning user-defined requirements and user-defined expectations with timer functionality;

creating one or more timer activities, wherein the timer activities involve one or more requirements and one or more expectations that include one or more mobile applications or tasks with pre-defined expectations corresponding to one or more rewards;

configuring allowed and disallowed mobile applications based on settings that include age-appropriate content, category, rating, and content type;

configuring allowed and disallowed content based on settings that include age-appropriate content, category, rating, and content type;

enabling and disabling mobile applications based on age-appropriate content, category, rating, and content type;

enabling and disabling access and control;

controlling access to mobile applications based on settings established by the server device user that include age-appropriate content, category, rating, and content type;

configuring allowed and disallowed URLs based on settings that include age-appropriate content, category, rating and content type;

receiving, viewing, and resetting usage history;

remotely installing and removing mobile applications;

remotely triggering an erase feature of selected applications or data;

remotely deleting all data and applications;

remotely configuring and controlling, enabling, and disabling wireless network access;

remotely configuring and controlling, enabling, and disabling a key and screen logger application;

remotely configuring and controlling, enabling, and disabling an existing camera application;

remotely configuring and controlling, enabling, and disabling, an existing screenshot application;

sending computerized instructions to the one or more client devices that enables instant audio or video communications between the server device and the one or more client devices;

controlling an ability for the server device user to create, edit, or delete contact records;

controlling an ability for the server device to disable or password protect a delete function;

creating alerts and notifications and associating the alert or notification to at least one of a task, calendar event, and timer activity;

initiating emergency calls and activating an emergency mode by pressing a user-defined sequence of numbers, referred to as a personal identification number; and

initiating a device locator feature.

* * * * *