CLAIMS

What is claimed:

1. A system operative to associate information with an asset or a physical space, comprising:

a plurality of building control fixtures, one or more of the plurality of building control fixtures comprising:

a sensor unit and an environment controller; wherein the sensor unit comprises;

a sensor, the sensor operative to generate a sense signal based on at least one of sensed motion or light;

communication circuitry, the communication circuitry operative to maintain a link with a network;

a controller, the controller operative to:

manage communication with the network;

generate environment adjustment control based on at least the sense signal;

and wherein

the environment controller is configured to receive the environment adjustment control and operative to adjust an environmental parameter of a structure of the plurality of building control fixtures based on the environment adjustment control;

wherein at least one of an external controller or at least one controller of the plurality of building control fixtures is operative to:

track a location of a first mobile device;

identify the first mobile device being within a threshold distance of a second mobile device or a physical place; and

allow the first mobile device or a user of the first mobile device to receive information associated with the second mobile device or the physical place, or to provide information to be associated with the second mobile device or the physical place upon identifying the first mobile device to be within the threshold distance of the second mobile device or the physical place.

2. The system of claim 1, wherein the sense signal is generated based on at least sensed motion, and wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to track locations of the first mobile device within the structure based on locations of the plurality of building control fixtures, based on received signal strength of beacons communicated between the sensor unit and

the first mobile device, and based on the sense signal, wherein the tracked locations include location estimates, wherein new location estimates based on the beacons that correspond with a location in which a building control fixture has not sensed motion are given a lower probability estimate compared to a location in which a building control fixture has sensed motion.

3. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to send alerts to the first mobile device or the user of the first mobile device relevant to a location of the first mobile device.

4. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to authenticate the first mobile device or the user of the first mobile device upon identifying the first mobile device to be within the threshold distance of the second mobile device or the physical place.

5. The system of claim 4, wherein authentication allows for determination of authorization of the first mobile device to access a present location of the first mobile device.

6. The system of claim 4, wherein authentication allows for determination of authorization of the first mobile device to access or provide information associated with the second mobile device or the physical place.

7. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to allow the first mobile device or the user of the first mobile to create alert data connected to a particular location and specify a user or group of users to receive the alert data when at least one mobile device of the user or the group of users is within the threshold distance of the particular location.

8. The system of claim 7, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to use a time period data for the alert data, or the threshold distance around the particular location where the alert data is relevant.

9. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to automatically control local environment and resources to conform to a user location and user preferences,

10. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to validate an identity of the first mobile device or a user of the first mobile device, and track the first mobile device or the user of the first mobile device, and provide or deny access to one or more areas based on credentials of the first mobile device.

11. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to track locations of a plurality of other mobile devices, and provide alerts to the first mobile device based upon the location of the mobile device and locations of one or more of the other mobile devices.

12. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to record past behavior of the first mobile device, predict future locations of the first device and alerts based on the recorded past behavior or calendar information.

13. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to allow the first mobile device or the user to subscribe to particular categories of location based alerts.

14. The system of claim 1, wherein the at least one of the external controller or the at least one controller of the plurality of building control fixtures is further operative to send messages to individuals or groups of people based on a current location of the individuals or groups of people.

15. The system of claim 1, wherein the environmental controller comprises a light controller and the environmental parameter comprises a light intensity.

16. A method of operating a building control fixture comprising:

generating, by a sensor of the building control fixture, a sense signal based on at least one of sensed motion or light;

maintaining a communications link between the building control fixture and a network;

managing communication with the network;

generating environment adjustment control based on at least the sense signal;

adjusting an environmental parameter of a structure of the building control fixture based on the environment adjustment control;

tracking a location of a first mobile device;

identifying the first mobile device being within a threshold distance of a second mobile device or a physical place; and

allowing the first mobile device or a user of the first mobile device to receive information associated with the second mobile device or the physical place, or to provide information to be associated with the second mobile device or the physical place upon identifying the first mobile device to be within the threshold distance of the second mobile device or the physical place.

17. The method of claim 16, wherein the sense signal is generated based on at least sensed motion, and further comprising tracking locations of the first mobile device within the structure based on locations of the plurality of building control fixtures, based on received signal strength of beacons communicated between the sensor unit and the first mobile device, and based on the sense signal, wherein the tracked locations include location estimates, wherein new location estimates based on the beacons that correspond with a location in which a building control fixture has not sensed motion are given a lower probability estimate compared to a location in which a building control fixture has sensed motion.

18. The method of claim 16, further comprising sending alerts to the first mobile device or the user of the first mobile device relevant to a location of the first mobile device.

19. The method of claim 16, further comprising authenticating the first mobile device or the user of the first mobile device upon identifying the first mobile device to be within the threshold distance of the second mobile device or the physical place.

20. The method of claim 19, wherein authentication allows for determination of authorization of the first mobile device to access a present location of the first mobile device.

21. The method of claim 19, wherein authentication allows for determination of authorization of the first mobile device to access or provide information associated with the second mobile device or the physical place.

22. A system operative to associate information with an asset or a physical space, comprising:

a plurality of building control fixtures located within a structure, one or more of the plurality of building control fixtures comprising:

a sensor unit, wherein the sensor unit generates a sense signal based on sensed motion; wherein the sensor unit comprises;

communication circuitry, the communication circuitry operative to maintain a link with a network;

a controller, the controller operative to:

manage communication with the network wherein the communication comprises at least information of the sense signal; and

wherein at least one of an external controller or at least one controller of the plurality of building control fixtures is operative to:

track locations of a first mobile device within the structure based on locations of the plurality of building control fixtures, based on received signal strength of beacons communicated between the sensor unit and the first mobile device, and based on the sensed motion, wherein the tracked locations include location estimates, wherein new location estimates based on the beacons that correspond with a location in which a building control fixture has not sensed motion are given a lower probability estimate compared to a location in which a building control fixture has sensed motion;

identify the first mobile device being within a threshold distance of a physical place based on the tracked locations of the first mobile device and a location of the physical space; and

allow the first mobile device or a user of the first mobile device to receive information associated with the physical place, or to provide information to be associated with the physical place upon identifying the first mobile device to be within the threshold distance of physical place.

23. A method of operating a building control fixture located within a structure comprising:

generating, by a sensor of the building control fixture, a sense signal based on at least one of sensed motion;

maintaining a communications link between the building control fixture and a network;

managing communication with the network wherein the communication comprises at least information of the sense signal;

tracking locations of a first mobile device within the structure based on locations of the plurality of building control fixtures, based on received signal strength of beacons communicated between the sensor unit and the first mobile device, and based on the sensed motion, wherein the tracked locations include location estimates, wherein new location estimates based on the beacons that correspond with a location in which a building control fixture has not sensed motion are given a lower probability estimate compared to a location in which a building control fixture has sensed motion;

identifying the first mobile device being within a threshold distance of a physical place based on the tracked locations of the first mobile device and a location of the physical place; and

allowing the first mobile device or a user of the first mobile device to receive information associated with the physical place, or to provide information to be associated with the physical place upon identifying the first mobile device to be within the threshold distance of the physical place.