

METHOD, DEVICE AND SYSTEM FOR PERSONALIZED AVATAR BASED ON USER DATA

FIELD OF THE INVENTION

[0001] The present invention relates generally to computer controlled graphical designs, communication, digital identity and more particularly a method, device and system for personalized avatar based on user data.

BACKGROUND OF THE INVENTION

[0002] In general computing, an avatar is a graphical representation of a user or the user's character or persona. In other words, avatar is a computer representation of users in two-dimensional or three-dimensional world which are represented through profile pictures, personal icons, chats, social media, virtual assistants, instant messaging platforms, video games. Often, these avatars are generated and customized to show unique representation of the user. Avatars can be characterized and customized based on the visual criteria common to humans such as gender, skin, hair color, hair styles and height etc.

[0003] Internet of Things (IoT) connects people with smart devices and computer interfaces in IoT environment which also provide immersive, engaging experiences to the users. An avatar in IoT environment provide various applications such as data today interactions, gaming, customer support interactions, training, sales etc. The avatar generation and customization involve various factors such as user data, user environment data. The conventional avatar generator does not provide context based, sensor based, user-based and user centric avatar customizations. Hence, there is a requirement and need to customize the avatar to provide more meaningful representations of the user in the virtual world or computer world. With such customizations, user can able to interact both real and virtual world in a better way. The following paragraphs provide a novel method, system and device for preparing, generating and customizing user centric avatars based on one or more user data, received from plurality of sensors, which can be shared within one or more computer devices and smart wearable devices.

SUMMARY OF THE INVENTION

[0004] In one aspect of the present invention, a method of generating and customizing one or more avatars, the method comprising steps of, receiving a request from a user by a smart wearable device, for at least one of generation, customization of avatar, transmitting to an application server by the smart wearable device, the user request along with plurality of data from one or more sensors through a mobile device, receiving the user request by the application server, categorizing and clustering, sensor data into at least one of activity, health,

physiological, mood and image data by the application server, identifying and extracting the features individually or combined from subject data by the application server, wherein, the identification of features is based on subject user request and extraction of features is based on the availability and category of user data, generating at least one or more avatars by the application server, for the subject user's request, wherein, the generation of avatar is based on at least one category of data and displaying at least one or more avatars in response to the user's request at the smart wearable device, received through the mobile device.

BRIEF DESCRIPTION OF DRAWINGS

[0005] FIG. 1 is an example system 100 for preparing, generating and customizing user centric avatars in an embodiment of the present invention.

[0006] FIG. 2 is an example avatar generation module 200 of the application server in an embodiment of the present invention.

[0007] FIG. 3 is a flowchart illustrating the first example method of generating or customizing one or more avatars in an embodiment of the present invention.

[0008] FIG. 4 is a flowchart illustrating the second example method of generating or customizing one or more avatars in an embodiment of the present invention.

[0009] FIG. 5 is a flowchart illustrating the third example method of generating or customizing one or more avatars in an embodiment of the present invention.

DETAILED DESCRIPTION

[0010] FIG. 1 is an example system 100 for preparing, generating and customizing user centric avatars in an embodiment of the present invention. The system 100 is shown comprising a smart wearable device 110, a mobile device 120, an application server 130, a database 140, an external server 150 and an external database 160. The smart wearable device 110 is connected and paired with the mobile device 120, wherein the subject smart wearable device 110 has one or more sensors to monitor one or more real time activities of the user. Further, the sensor data recorded by the smart wearable device 110 is shared with the mobile device 120 and processed at the application server 130. In one aspect, smart wearable device 110 is directly connected with the application server 130 to receive one or more instructions, updates and to send one or more requests, information etc. The mobile device 120 is configured with a mobile application which communicates with the smart wearable device 110, application server 130 and the database 140. The mobile application identifies the smart wearable device 110 through a unique device ID (or hardware or MAC ID). The application server receives at least one request to prepare, generate or to customize an avatar, from any of the user's mobile device or smart wearable device. The application server 130 is also capable of processing, filtering, organizing

structuring the one or more activity data captured by one or more sensors, through one or more algorithms, received either from the mobile device 120 or smart wearable device 110, to prepare, generate and customize one or more avatars, in relation to the user, user's environment and context. The database 140 is capable of storing and indexing the processed avatar information from the application server 130, through one or more identifiers unique to the user. The application server 130 is an internal server where all requests, data relating to the smart wearable device 110 or mobile device 120 (through mobile application) is processed and stored in the database 140 further which is internal to the system or may be accessed by one or more internal servers. The application server 130 receives at least one request for avatar generation or customization from a user's mobile device or smart wearable device. The application server 130 based on the subject request, activity data of the user, and one or more contexts mentioned by the user in the subject request, prepare and generate at least one avatar for the user or customize at least one avatar from the plurality of avatars stored in the database, which are identified by unique identifiers. In an embodiment, each avatar has a unique identifier. In another embodiment, the identifiers identify and retrieve at least one avatar from the plurality of avatars wherein, identifiers are combination of numerals, letters, alpha numeric characters, which are automatically generated by the application server 130. The application server 130 is capable of identifying and retrieving at least one avatar from the database 140 when the user's current request matches with one or more previously processed requests, through unique avatar identifier. Further, the application server 130 is collection of internal servers and database 140 is a collection of databases, which are intra connected or interconnected. In one aspect of present invention, the external server 150 is the one where, where the application server 130 receives and renders plurality of application or design related information including avatar creation, preparation, generation, and customization when such information are not produced internally by the application server 130. In an embodiment, the mobile application configured in user's mobile device initiates one or more requests and API calls via application server 130 to receive such avatar information from external server 150. The external database 160 is connected with external server 150 which stores plurality of avatar information, indexed data relating to the avatar generation or customization, which are being called and sent when the request and API call is initiated by the mobile application, through one or more identifiers, and data transfer happens through external server 150 and the application server 130 and arrive at the mobile device 120 and displayed to the user either in the mobile device 120 or in the smart wearable device 110.

[0011] FIG. 2 is an example avatar generation module 200 of the application server 130 in an embodiment of the present invention. As shown there, the avatar generation module 200 consists of avatar database 205 and avatar module 240, wherein the avatar module 240 further comprises, an activity cluster 245, a mood cluster 250, an image cluster 255 and an avatar generator 260. The avatar database 205 comprises a user data 210, an activity data 215, a physiological data 220, a mood data 225 and an image data 230. In an embodiment, an avatar database 205 may be accompanied only for generating and customizing avatar and specific for avatar module 240. Avatar is a graphical representation of a user, or the user's character or user's persona. In other words, avatars are two or three-dimensional figures (2D or 3D) or pictorial representation of the user or user's image, with incidental and environmental elements, which are specific to the user.

[0012] In an embodiment, the avatar generation module 200 is configured in the application server 130, or in the mobile device 120. The avatar generator 260 of avatar module 240 is connected with the activity, physiological, mood and image clusters (245, 250 and 255). The components of avatar module 240 are connected to the avatar database 205, wherein, the avatar database 205 stores plurality of data not limited to user data, activity data, physiological data, mood data, image data (210, 215, 220, 225 and 230), relating to the user. The avatar database 205 may also store other incidental or circumstantial images, which may be used during the generation or customization of avatar. In another embodiment, the activity data, physiological data, mood data (210, 215, 220 and 225) from avatar database 205 are supplied to the activity cluster, and mood cluster (245 and 250), respectively. The image data 230 from avatar database 205 is supplied to the image cluster 255.

[0013] The default user data 210 may include but not limited to name, age, gender, dob, contact, height, weight, address, location, facial characteristics, body characteristics etc. The activity data 215 includes fitness data, steps, calories burnt, distance covered, type of activity/sport performed, activity intensity level, historical data, goals, achievements (daily, weekly, monthly, yearly or for a specific period), trophies, badges, gestures performed, any movement of body (including gait), or any actions performed by the user during any activity etc. The physiological data 220 includes, sleep data (includes, sleep score, light, deep, awake, REM, sleep stages tracking data), heart data (heart rate, ECG, blood flow, blood sugar levels, oxygen saturation, blood pressure etc), raw ppg data, iv fluids, spO2, sweat data, fatigue data, energy level data, stress data, body temperature, any health data related to body or body parts. The mood data 225 includes, the current emotional state of the user, historical emotional data, data relating to one or more situations experienced by the user (joy, angry, sad etc). In an

embodiment, the mood of the user is determined based data from electrocardiogram (ECG) sensor, pulse rate from photoplethysmogram (PPG) sensor, skin temperature, electrodermal activity (EDA), arterial oxygen saturation (SpO₂), blood pressure (BP) and respiration rate (RR). The mood of the user may be at least one of but not limited to happy, excited, tired, sad, stressed and angry.

[0014] The image data 230 includes, the photos taken by the user by the mobile device or smart wearable device during the activity, or at the start and end of the any activity, or any photo taken by the user, shared with the user (photos of user taken by other people, photos of any group activities), photos of user with other people, photos of user in various environments or situations, or locations. In an embodiment, all photos are indexed, sorted and categorized in the database. The categories of photos include, self-photos taken by the user, photos of user taken by other users/people. The photos are categorized based on the location, time, activity related, mood related, health related etc. The activity and mood cluster receives all user, activity data, physiological data and mood data, and image cluster receives image data stored in the database.

[0015] In an aspect of the present invention, application server which process the plurality of sensor data received from mobile device, or smart wearable device, and also capable of storing them in the database under one or more category. In an embodiment, the database stores a database of plurality of avatar modules, libraries specifically configured for that user. In an embodiment, users take one or more self-pictures (selfie, face, body etc) in the mobile device and these images are shared with the application server for processing. During processing of the images, the application server employs one or more algorithms, ML algorithms to determine facial characteristics of the subject user. The facial and body characteristics of the user are identified, categorized and are stored in the user data.

[0016] When the application server or mobile device receives a request to create or customize an avatar or graphical representation, the avatar generator process the requests by analyzing the data available from one or more clusters. The avatar generator 260 retrieves user data, activity data, mood data and image data based on the subject request received from the user. The avatar generator 260 is capable of analyzing the subject user request and capable of identifying, selecting and retrieving at least one of user data, activity data, mood data and image data to prepare and generate or customize an avatar in real time.

[0017] In an embodiment, the avatar is generated or customized based one or more aspects including but not limited to user taking a photo (real time), user manually entering current activity or mood or physiological status in a mobile application, and application server automatically creates and generates or customizes an avatar based on the collected data of the

user and surrounding environment including weather or any particular location or place or any data (historical or current data relating to user's activity, physiological data, mood data etc, real time data relating to the user such as current activity, status, mood of the user). The avatar may also be generated or customized based on the future activities, events, or health or mood, to provide more focus for the user in the current event or activities (which are relating to improving any aspect of user's health, day to day activity, sleep etc) and may also provide one or more goal or activity or event-oriented avatars which are related to the subject user and one or more users, or group of users if the subject user is participating in a group event.

[0018] The user takes a photo of himself through the mobile device or any other photo capturing device. The image of the user along with surrounding environment is transmitted to the application server, along with the request to prepare and generate an avatar for the image taken by the user. In an embodiment, the user's surrounding environment (in an avatar) is automatically suggested or supplied to the avatar generator. The avatar generator 260 of avatar generation module 200 configured in the application server receives the request. The avatar generator 260 processes the request by analyzing the input image characteristics and compare with the data from the image cluster 255. Firstly, the avatar generator 260 confirms whether the input image is the image of the user, if so, the avatar generator 260 analyzes the input image with plurality of images for which avatars are already created and generated. If it identifies an image which is equal to the current input image of the user, then the avatar generator 260 retrieves the avatar previously created, generated or customized for the similar type of image, otherwise an avatar is created for the input image of user. In an embodiment, the avatar generator 260 may also identify and retrieve suitable comments (relating to the activity, health, mood, or future activity etc), which may be positioned and appended on the final output image of avatar. Finally, the avatar with comments is displayed to the user on the mobile device or in a smart wearable device. The size of the generated or customized avatar may be custom made and can be accommodated for any of the user computer devices or smart wearable devices. In another embodiment, the avatar generator 260 does not check and verify previous similar avatar created and stored. The avatar generator 260 creates or customizes a new avatar in real time based on the current input image and activity related.

[0019] The user may manually enter the activity data, current mood status, or a location or a place in the mobile device. In general, based on the given activity data or mood status, location and place, the application server creates or customizes one or more avatars and display to the user.

[0020] The application server automatically creates and generate one or more avatars based on user data, activity data, physiological data, mood data, image data and places or locations visited by the user in the past. The avatars are generated or customized with custom set of apparels, gender, color, and traditions. The application server has plurality of libraries categorized to provide a user customized avatar. These libraries are either stored in the standalone database and are fetched whenever a new avatar is created or generated or customized. Also, these libraries may be stored and fetched on request, from the cloud database or external database. The generated or customized avatars (along with environmental factors or surrounding elements) are stored and indexed separately in the database, and are fetched when user requests. In an embodiment, when a new data is identified under activity, user, mood, or physiology, an avatar is automatically created, generated or customized and stored in the database. For example, a set of customized avatars are created when user the user requests. These customized avatars are shared with other users or group of people in time to time or need basis. The avatars are also published on request to the user or automatically displayed on the display screen of the user's mobile device or smart wearable device and shared or part with the spec score screen of the user. The avatars are created to provide meaningful messages to the user with respect to their own data (activity, physiological, mood etc). The avatar alone or along with comments (motivational content or depicting past, present or future status of the user) may be shared with one or more users or current connected group of users. Also, those avatar images may also be shared as email, message etc. Also, the application server automatically creates plurality of comments, word phrases based on user data, activity data, physiological data, mood data and image data. In an embodiment, the comments or word phrases are separately created or generated by the user data, activity data, physiological data, mood data, image data of the user managed and processed by the application server and stored separately in the database. These comments or word phrases unique for each data may be combined with the avatar image or separately shared as a message to the user.

[0021] Example 1: When the user achieves his goal (for example, 10000 steps in a day), then the avatar is created or customized with user's image (with Joyous/happy face) and commenting 'Hurray, you have made it !!!'.

[0022] Example 2: When the user is little depressed, then the avatar is created or customized with user's image depicting the current depressed status of the user.

[0023] Example 3: When the user finishes marathon with friends and takes a selfie, then the avatar is created with user's image (taken from the selfie photo in real time) and displays the user with a unique avatar image (with happiness face and trophy on the hand). Also, when the

user takes selfie with friends, plurality of avatars is created (based on number of persons in the selfie image taken) and displayed as a 'Group of avatars' to the user.

[0024] FIG. 3 is a flowchart illustrating the first example method of generating or customizing one or more avatars in an embodiment of the present invention. As shown there, in step 310, the micro controller of smart wearable device receives one or more data from one or more sensors, organized in the smart wearable device. These sensor data is shared over a network with the mobile device and by means of a mobile application, a user request may be received to generate or customize an avatar. Further, the mobile device transmits the sensor data to the application server for processing. In step 320, the application server receives the avatar generation or customization request along with sensor data and application server is also capable of sorting, listing and categorizing the subject sensor data in to at least one of user, activity, health, physiological, mood and image. These categorized sensor data are stored as user data, activity data, health data, physiological data, mood data and image data in the avatar database. Further, application server is configured with one or more clusters and modules to handle the sensor data. In an embodiment, the application server has an activity cluster, mood cluster and image cluster, to predominantly categorize and normalize the sensor data. The activity cluster receives one or more inputs from user data, activity data, physiological data (including health data) and mood data. Activity cluster handles and processes plurality of data and filter them based on at least one or more activities (activities are either created by user or automatically assigned and grouped by the applications server). The mood cluster handles and processes plurality of data and filter them based on at least one or mood (current mood status) of the user, this mood related information is identified through variation in heartbeat, heart rate, body temperature, sweat and other physiological parameters of the user. The mood data is provided to activity cluster is to identify, categorize, and store the mood status of the user for at least one activity. Also, the user data, physiological data and activity data is provided to mood cluster to determine and analyze various moods of the user, its occurrence, change in mood status, monitoring the physiological status of the user. The activity cluster, mood cluster and image cluster are connected to an avatar generator. The avatar generator is a module which receives a request for a generating or customizing an avatar based on user's interest or based on the avatar customization algorithm configured. Initially, for every user, the avatar customization algorithm generates an avatar with a unique avatar ID. The avatar ID is unique to the subject user and user requests are received with unique avatar ID. The avatar of user is created or generated based on the user's personal data or appearance settings such as name, age, height, weight, gender, color type, ethnic type, body build, location, dress choice, facial

characteristics (such as position of eyes, nose, mouth, ears), appearance of face, facial hair, (moustache, beard etc), positioning of hair in head (including hair type, color, density) etc. This is one time activity or a first-time activity, where the avatar is created or generated based on user's interest and choice selection. The subsequent requests from the user to customize the avatar shall be specifically based on this first generated avatar.

[0025] In step 330, the avatar generator extract features individually or combined from these data. The avatar generator is capable of identifying the required features and data of user from one or more clusters, that are relating to the subject request.

[0026] For example, user performs gym activities, then the avatar generator immediately customizes the user's avatar which depicts user appearance with track suit, user holding a dumbbell in hand and with a facial expression 'working hard' and a comment 'way to go'.

[0027] In step 340, the avatar generator of the application server creates and generate or customize one or more avatars for the at least one category of data. The category of data includes but not limited to user, activity, mood, physiological (health) and image of the user. In step 350, the avatar generator of application server publishes, shares with one or more user connected devices and displays the one or more customized avatars generated on the at least one connected mobile device or smart wearable device of the user.

[0028] FIG. 4 is a flowchart illustrating the second example method of generating or customizing one or more avatars in an embodiment of the present invention. As shown there, in step 410, the mobile device or smart wearable device receives a first input from the user. The user may manually input current user status, activity status, mood status or health status. In step 420, the mobile application configured in the mobile device is capable of analyzing such inputs and sort them at least one identified category (activity, health, mood etc). The user's request may be is to create or customize an avatar for the input data. In an embodiment, the mobile application is configured with one or more modules to specifically receive and handle such requests from the user. In an embodiment, the mobile application shares the first input provided by the user to the application server and application server is capable of analyzing and sorting them into at least one category. In step 430, the avatar generator of application server identifies the user's request to create an avatar and category to prepare the avatar and prepare a first information.

[0029] In step 440, the avatar generator extract features individually or combined from these data, for the first information. The avatar generator is capable of identifying the required features for the first information and data of user from one or more clusters, that are relating to the subject request.

[0030] In step 450, the avatar generator of application server creates and generates one or more avatars for the first information. In an embodiment, the one or more avatars created and generated are separately stored in a database with the user's profile data. In step 460, the avatar generator of application server publishes, shares with one or more user connected devices and displays the one or more customized avatars generated on the at least one connected mobile device or smart wearable device of the user.

[0031] FIG. 5 is a flowchart illustrating the third example method of generating or customizing one or more avatars in an embodiment of the present invention. As shown there, in step 510, the mobile device (configured with the mobile application) receives at least one input image from the user. The mobile application prepares the avatar creation request with input image information and shares with the application server. The input image may be a user image, or any image or any group image. The image information includes at least one image, time taken, any status data of the user. The image information may also include plurality of images and status data. In step 520, the avatar generator of the application server receives the request, analyze the input image with at least one of the categories (activity, health, mood etc) and any historical image data.

[0032] In step 530, the avatar generator extract features individually or combined from these data to customize the avatar. The avatar generator is capable of identifying and analyzing the required features and data of user from one or more clusters, that are relating to the subject request.

[0033] In step 540, the avatar generator of the application server creates and generate customize one or more avatars based on the subject input image or images. In step 550, the avatar generator of application server publishes, shares with one or more user connected devices and displays the one or more customized avatars generated on the at least one connected mobile device or smart wearable device of the user.

[0034] The objective of this invention is to create and generate or customize one or more personalized avatars for the user to depict his nature, achievements, activities, emotions, mood, activity status, health data, characteristics as a graphical representation. The avatars may anytime be motivational or depict past, present or future status of the user, in relation to activity, health, sleep, mood, etc. The avatars are also created or customized in real time so that, it shows the current activity status or achievement or any instance in activity (as identified by the application server), emotions and mood of the user.

[0035] Following are one or more aspect of the present invention. A first server which is connected with the mobile device of user. The user performs any activity and there is a change

in activity data, mood data, health data, or physiological data of user. The first server automatically prepares a request for customization of avatar and send that request to avatar server wherein which avatar are separately created or customized with the avatar customization algorithm.

[0036] For example, user walks/runs in during sunny climate, then the server automatically customizes the user's avatar with sweating and fatigue (depends on duration of activity) and depicted with hotness of Sun (based on the current weather data in the user's locality).

[0037] In another example, user playing tennis game, the server automatically customizes the user's avatar showing the playing tennis game (holding tennis racket in hand, or serving tennis ball) and tennis sport outfit. In an embodiment, those customized avatars/avatar are generally graphical representation or an image or GIF image or a moving image, displayed to the user time to time, or while playing tennis or when user want to play (if user has scheduled playing tennis every day at a particular time, this avatar shall be popped up and shown on the display of the device or wearable device, saying a message 'It's time to play tennis').

[0038] In an embodiment, an Avatar is generated when a request from a user is made, and customization is also part of generation, where user can choose different kinds of customization options relating to physiological data, mood, activity etc.

[0039] In another embodiment, the avatar is generated once for the user data and customization is triggered by the system based on the previous choices made by the user and system auto customizes various avatars for the user.

[0040] While various embodiments of the present disclosure have been described above, it should be understood that they have been presented by way of example only, and not limitation. Thus, the breadth and scope of the present disclosure should not be limited by any of the above-discussed embodiments but should be defined only in accordance with the following claims and their equivalents.

Claims

I/ We claim,

1. A method of generating and customizing one or more avatars, the method comprising:
 - receiving, by a smart wearable device, a request from a user, for at least one of generation and customization of avatar;
 - transmitting, by the smart wearable device to an application server, the user request along with plurality of data from one or more sensors through a mobile device;
 - receiving, by the application server, the user request;
 - categorizing and clustering, by the application server, sensor data into at least one of activity, health, physiological, mood and image data;
 - identifying and extracting, by the application server, the features individually or combined from subject data, wherein, the identification of features is based on subject user request and extraction of features is based on the availability and category of user data;
 - generating, by the application server, at least one or more avatars for the subject user's request, wherein, the generation of avatar is based on at least one category of data; and
 - displaying, at the smart wearable device, at least one or more avatars in response to the user's request.
2. The method of claim 1 further comprising:
 - receiving, by a mobile device, a first input from the user, wherein, the first input is a user input comprising one request of generation and customization of avatar and at least one status of current activity, health, and mood; and
 - sorting, by the mobile device, the status of user into at least one category of user data, activity, physiological data, mood data.
3. The method of claim 1 further comprising:
 - receiving, by a mobile device, a first input from the user, wherein, the subject input includes at least one request and an image input, to generate or to customize an avatar; and
 - analyzing, by an application server, the subject request and the image data, wherein, image data is categorized into at least one of activity, physiological data, mood data;

4. The method of claim 3, wherein, the image input comprises at least one of user image, group image taken by the mobile device in real time, user's historical image, group image, user's image with or without surrounding environment.
5. An avatar generation module configured in an application server, the avatar generation module comprising:
 - an avatar database is capable of organizing and storing the data into one or more clusters of data; and
 - an avatar module is capable of receiving a request for generation or customization of avatar, wherein, the avatar is generated or customized based on at least one or more data received from the avatar database;
6. The avatar generation module of claim 5, further comprising:
 - a user data is capable of organizing and storing at least one of name, age, gender, dob, contact, height, weight, address, location, facial characteristics, body characteristics of the user;
 - an activity data is capable of organizing and storing at least one of, fitness data, steps, calories burnt, distance covered, type of activity/sport performed, activity intensity level, historical data, goals, achievements, activity data relating to specific period, trophies, badges, gestures performed, any movement of body, gait, historical activity data, or any actions performed by the user during any activity;
 - a physiological data is capable of organizing and storing at least one of, sleep data, sleep score, status of sleep, light sleep, deep sleep, awake, one or more sleep stages tracking data, heart data, heart rate, ECG, blood flow, blood sugar levels, oxygen saturation, blood pressure, raw ppg data, IV fluids, SPO2, sweat data, fatigue data, energy level data, stress data, body temperature, historical health data and any health data related to body or body parts of the user;
 - a mood data is capable of organizing and storing at least one of, current emotional state of the user, historical emotional data, data relating to one or more situations experienced by the user;
 - an image data is capable of organizing and storing at least one of, the photos taken by the user by the mobile device or smart wearable device during any activity, or at the start and end of the any activity, or any photo taken by the user, any photo shared with the user including photos of user taken by other people, photos of any group activities, photos of user with other people, photos of user in various environments or situations, or locations;

an activity cluster is capable of analyzing and determining one or more status of the user, based on the at least one input received from the user data, activity data, physiological data and mood data;

a mood cluster is capable of analyzing and determining at least one mood of the user, based on the at least one input received from the user data, activity data, physiological data and mood data, wherein the mood status is at least one of happy, excited, tired, sad, stressed and angry;

an image cluster is capable of analyzing and determining at least one status of the user, by means of feature extraction and based on the at least one input received from the image data;

an avatar generator is capable of generating or customizing one or more avatars based on at least one user request and data and status received from at least one of activity cluster, a mood cluster and image cluster.

7. The avatar generation module of claim 5, wherein, user data, activity data, physiological data, mood data and image data are components of avatar database, wherein, activity cluster, mood cluster, image cluster and avatar generator are components of avatar module.
8. The avatar generation module of claim 6, wherein, the mood data of the user is based on the one or more sensor data relating to heart rate from electrocardiogram (ECG) sensor, pulse rate from photoplethysmogram (PPG) sensor, skin temperature, electrodermal activity (EDA), arterial oxygen saturation (SpO₂), blood pressure (BP) and respiration rate (RR).
9. The avatar generation module of claim 6, wherein, the image data is organized into at least one of time, location, activity, mood, health of the user.
10. A system for generation and customization of an avatar, the system comprising:

a smart wearable device is capable of at least receiving one request from the user for avatar generation and receiving plurality of sensor data from one or more sensors, wherein, the subject request and sensors data are transmitted to a mobile device over a communication network;

a mobile device is capable of receiving the user request and sensor data from the mobile data, wherein, the sensor data is organized by a mobile application configured in the mobile device, wherein, the user request and sensor data relating to user are transmitted to the application server;

an application server is capable of receiving the user request and sensor data of the user is sorted, categorized into one or more cluster, wherein, an avatar is generated or customized based on the request and one of more data received from one or more clusters, wherein the generated or customized avatar is shared to the smart wearable device and the mobile device; and

a database is capable of storing the generated or customized avatar; and

the smart wearable device and the mobile device display and publishes the avatar shared by the application server.

11. The system of claim 10, further comprising:

an external server capable of generating or customizing an avatar based on the user request and data received from the application server; and

an external database is capable of storing the generated or customized avatar and sharing the avatar with the application server.