Title: SYSTEM AND METHOD FOR FACILITATING REQUEST AND SCHEDULING OF TRANSPORT SERVICES IN EMERGENCY CONDITIONS

Abstract: Exemplary embodiments of the present disclosure are directed towards a system for facilitating request and scheduling of transport services in emergency conditions, comprising: at least one user's computing device configured to initiate a request to a vehicle's computing device by an user, the vehicle's computing device is configured to allow the request done by the user for scheduling of transport service. At least one request acceptance and scheduling system configured to accept the requests done by the user and schedule a vehicle to the request initiated user, communications are established between the user's computing device and the vehicle's computing device by the at least one request acceptance and scheduling system.
"SYSTEM AND METHOD FOR FACILITATING REQUEST AND SCHEDULING OF TRANSPORT SERVICES IN EMERGENCY CONDITIONS"

TECHNICAL FIELD

[001] The present disclosure generally relates to the field of methods and systems for providing transport services in emergency conditions. More particularly, the present disclosure relates to a system and method for facilitating requests and scheduling of transport services in emergency conditions.

BACKGROUND

[002] Medically assisted travel is especially valuable for people with momentary or temporary disability to travel due to medical ailments or special needs and requirements, helps to reach their medical appointments or physiotherapy treatments or diagnostic centers for their prescribed tests or for dialysis etc. or the people simply attend their family gatherings, get-togethers, visit to places of worship, movies and other entertainment purposes.

[003] Currently, any individual with disability has not much choice while wanting to do a travel. If the disability is minor and manageable then they choose the conventional modes of travel like cab or individual car or any public transport. But if the disability is mild to major then there is no convenient choice available for the person to travel. Either the patient cancels his trip or travels with lot of discomfort and/or adjustments.

[004] In the light of aforementioned discussion there exists a need for certain system with novel method that would overcome or ameliorate the above mentioned disadvantages.

BRIEF SUMMARY

[005] The following presents a simplified summary of the disclosure in order to provide a basic understanding to the reader. This summary is not an extensive overview of the disclosure and it does not identify key/critical elements of the invention or delineate the scope
of the invention. Its sole purpose is to present some concepts disclosed herein in a simplified form as a prelude to the more detailed description that is presented later.

[006] An objective of the present disclosure is directed towards providing any time nurse services to the people at their locations and also provide required doctors consultation.

[007] Another objective of the present disclosure is directed towards providing assistance to patients by contributing first aid tips through a computing device.

[008] Another objective of the present disclosure is directed towards requesting emergency vehicles during emergency conditions in the offline mode without requiring an internet.

[009] Another objective of the present disclosure is directed towards contributing services to persons who are in need.

[010] Another objective of the present disclosure is directed towards monitoring users health condition based on the reports by entering the values in the computing device and displaying the health conditions through a graphical representation.

[011] Another objective of the present disclosure is directed towards providing discounts (for example coupon codes, vouchers, and playback points) to the users during payment transactions for scheduled vehicles.

[012] Another objective of the present disclosure is directed towards distributing of information related to web posts and articles by one user with other user for keeping them posted and make them aware of information pertaining to their respective medical conditions.

[013] Another objective of the present disclosure is directed towards assisting transport caters to the needs of people who can travel and commute to the places they wish to visit conveniently.

[014] Another objective of the present disclosure is directed towards viewing list of blood banks based on the selection of locations.

[015] Another objective of the present disclosure is directed towards allowing more possibilities for people with lack of mobility due to the medical or physical reasons.
Another objective of the present disclosure is directed towards fulfilling the user's desires of visiting places, trips and tours in the locations as well as outside locations on a pre-booked schedule.

Another objective of the present disclosure is directed towards sending health tips to the users based on the health conditions.

Another objective of the present disclosure is directed towards receiving reminders to the users based on added prescription and added respective times for the intake of medicines.

Another objective of the present disclosure is directed towards alerting family members and medical assistants with some sounds in case of emergency situations.

Another objective of the present disclosure is directed towards sending push notifications on timely basis to make the customers get benefit by the tips.

Yet another objective of the present disclosure is directed towards sending daily pop-ups, nutrition advices and well-being tips to the customers.

Exemplary embodiments of the present disclosure are directed towards a system and method for facilitating request and scheduling of transport services in emergency conditions.

In some embodiments, the system comprises a user's computing device configured to initiate a request to a vehicle's computing device by a user, the vehicle's computing device configured to allow the request done by the user for scheduling of transport services.

In some embodiments, the system comprises a request acceptance and scheduling system configured to accept the requests done by the user and schedule a vehicle to the request initiated user, communications are established between the user computing device and the vehicle's computing device by the at least one request acceptance and scheduling system.

**BRIEF DESCRIPTION OF DRAWINGS**

Other objects and advantages of the present invention will become apparent to those skilled in the art upon reading the following detailed description of the preferred embodiments, in conjunction with the accompanying drawings, wherein like reference
numerals have been used to designate like elements, and wherein:

[0026] FIG. 1 is a block diagram depicting an environment for facilitating request and scheduling of transport services in emergency conditions, in an exemplary embodiment of the present disclosure.

[0027] FIG. 2 is a block diagram depicting the architecture of the system 102 of FIG. 1, in an exemplary embodiment of the present disclosure.

[0028] FIG. 3 is a block diagram depicting the computing device 104 disclosed in FIG. 1, in an exemplary embodiment of the present disclosure.

[0029] FIG. 4 is a flow diagram, depicting a method for facilitating request and scheduling of transport services in emergency conditions, in an exemplary embodiment of the present disclosure.

[0030] FIG. 5 is an example flow diagram, depicting method for scheduling of vehicle in emergency conditions, in an exemplary embodiment of the present disclosure.

**DETAILED DESCRIPTION**

[0031] It is to be understood that the present disclosure is not limited in its application to the details of construction and the arrangement of components set forth in the following description or illustrated in the drawings. The present disclosure is capable of other embodiments and of being practiced or of being carried out in various ways. Also, it is to be understood that the phraseology and terminology used herein is for the purpose of description and should not be regarded as limiting.

[0032] The use of "including", "comprising" or "having" and variations thereof herein is meant to encompass the items listed thereafter and equivalents thereof as well as additional items. The terms "a" and "an" herein do not denote a limitation of quantity, but rather denote the presence of at least one of the referenced item. Further, the use of terms "first", "second", and "third", and the like, herein do not denote any order, quantity, or importance, but rather are used to distinguish one element from another.

[0033] Referring to FIG. 1 is a block diagram 100 depicting an environment for facilitating
request and scheduling of transport services in emergency conditions, in an exemplary embodiment of the present disclosure. The environment 100 depicts a request acceptance and scheduling system 102 for facilitating request and scheduling of transport services in emergency conditions. The environment further includes computing devices 104a-104b, networks 106a-106b, and a database server 108.

[0034] The request acceptance and scheduling system 102 may be installed in the computing devices 104a-104b. The request acceptance and scheduling system 102 may be accessed as a mobile application (for example: android application, IOS application), a web application or other software application known in the art of future implemented, without limiting the scope of the present disclosure. The database server 108 may include, but not limited to, a hierarchal database server, a network database server, or the like, and includes content such as text, numerical data, images, or the like. The request acceptance and scheduling system 102 may be allowed to book vehicles for moving to emergency locations. The request acceptance and scheduling system 102 may able to perform seat modification of vehicle, schedule recurring bookings in accordance with requirement of the users. The request acceptance and scheduling system 102 may perform payment transactions for the post completion of scheduled vehicles. The payment transactions may be done with the help of payment gateways. The payment gateways that authorize credit card or direct payment processing.

[0035] In accordance with non-limiting exemplary embodiments, the computing devices 104a-104b may include, but not limited to, a user’s computing device 104a and a vehicle’s computing device 104b. The database server 108 may include, but not limited to, a hierarchal database server, a network database server, or the like, and includes content such as text, numerical data, images, or the like. The request acceptance and scheduling system 102 may include, but not limited to, a customer app, a user's app, a client app, an ambulance app, a service app, and the like. The request acceptance and scheduling system 102 may be provided exclusive to the tie-up with the customer for any individual with a smartphone to use it. The computing devices 104a-104b may be enabled a booking screen. For example, the hospitals may be filtered based on the emergency type selected. The request acceptance and scheduling system 102 may support rides for discharge as well. The hospitals current locations may be auto-populated and patient select a drop location in the computing device 104a-104b. The drop location may include a home, a hospital, a blood bank, a safest place and the like without limiting the scope of the present disclosure. The request acceptance and scheduling
system 102 may support selection of specific hospital ambulances. The computing devices 104a-104b may be enabled to perform auto-calculate and display of ride fares after trip completion using the request acceptance and scheduling system 102.

[0036] In accordance with non-limiting exemplary embodiments, the emergency vehicles may provide supports to the customers which include an oxygen cylinder, a wheel chair, masks and the like. The request acceptance and scheduling system 102 may provide medical assistances locations based on the users need. The medical assistance may include a doctor, a male medical assistant, and a female medical assistant. Communications may be established between the user's computing device 104a and the vehicle's computing device 104b by the request acceptance and scheduling system 102. The communications may include short message formats, mails, multimedia services and the like without limiting the scope of the present disclosure. The users may include, but not limited to, customers, consumers, patients, clients, doctors and the like. The vehicle's computing device 104b may be operated by drivers, emergency service providers and the like without limiting the scope of the present disclosure.

[0037] In accordance with non-limiting exemplary embodiments, for an example in the emergency vehicles: a front seat next to driver seat in a car may be rotated up to 90 degrees to make it comfortable for the patients to be seated. After the patient sits, chair may be moved to normal position. The emergency vehicles may include, but not limited to, medical taxies, normal cars which converted as emergency vehicles, buses and the like. The users may view list of blood banks available based on the selection in the computing devices 104a-104b. The computing devices 104a-104b may be maintained the complete medical history of the users. The patients may have an option to change it. Whenever the requests for an ambulance, all the previous history may be sent to the hospital and the doctors to check the records in advance.

[0038] The term computing devices 104a-104b may be used herein to refer to any device with processing capability such that it can execute instructions. Those skilled in the art will realize that such processing capabilities are incorporated into many different devices and therefore the terms computer and computing device 104a-104b each include smart phones, PCs, laptops, servers, tablet computers, personal digital assistants and many other devices. The network 106a-106b may include, but not limited to, an Ethernet, a wireless local area network (WLAN), or a wide area network (WAN), a ZigBee wireless network, a Bluetooth
wireless network, a WIFI communication network e.g., the wireless high speed internet, or a combination of networks.

[0039] Referring to FG. 2 is a block diagram 200 depicting the architecture of the request acceptance and scheduling system 102 of FIG. 1 in some embodiments. The system 102 may include, a registration module 202, a request module 204, a scheduling module 206 and a communication module 208. The registration module 202 may be configured to register the user details for easy accessing. The user details may include, but not limited to, mail identities, passwords, phone numbers, pin numbers and the like. For example, a patient may book an ambulance in just one click in the user computing device 104a.

[0040] Once the registration process done by the users, the users are enabled to request the vehicles for the required locations. Here, the locations may include, but not limited to, personal gathering meeting points, family functions, parties, movies, or any other entertainment related events, hospitals, care centres, religious places, and the like without limiting the scope of the present disclosure. The request module 204 may be configured to receive requests made by the users in the computing devices 104a-104b. The scheduling module 206 may be configured to schedule the vehicles for a specific time. The users may schedule the vehicles on a recurring basis by the scheduling module 206. The recurring may be done in two days a week or recurring in four days a week. The scheduling module 206 may estimate task execution time to the database server 108 for scheduling of the task to the computing devices 104a-104b.

[0041] The communication module 208 may be configured to establish communications between the computing devices 104a-104b upon the requirement for a service generated by the user. The user upon analyzing the requirement of the service, in cases not limiting to an accident, a fire, a labor case, cardiac problems, convulsions, fall, and emergencies at home, office, school and the like may send the request for an appropriate service (which may be a medical emergency service). The request acceptance and scheduling system 102 embedded in the computing devices 104a-104b is configured to respond to the service request by the user in real time and connect the user to the nearest service provider. For example: in case of an accident the user may book an ambulance for catering to the emergency. The service provider receives the request for the same and immediately routes the request for the ambulance to be sent to the user. The request may be applicable when the user is discharged from the health centre.
[0042] Referring to FIG. 3 is a block diagram 300 depicting computing devices 104a-104b disclosed in FIG. 1, in an exemplary embodiment of the present disclosure. The computing devices 104a-104b comprise one or more processors 302 which may be microprocessors, controllers or any other suitable type of processors for processing computer executable instructions to control the operation of the device. The request acceptance and scheduling system 102 comprising an operating system or any other suitable platform software may be provided at the computing devices 104a-104b to enable the application software to be executed on the device. The computer executable instructions may be provided using any computer-readable media 304 that is accessible by the computing device 104a-104b.

[0043] Computer-readable media 304 may include, for example, computer storage media such as memory and communications media. Computer storage media, such as memory, includes volatile and non-volatile, removable and non-removable media implemented in any method or technology for storage of information such as computer readable instructions, data structures, program modules or other data. Computer-readable media 304 includes, but is not limited to, RAM, ROM, EPROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other non-transmission medium that can be used to store information for access by the computing devices 104a-104b. The Computer-readable media 304 further comprises the registration module 202, the request module 204, the scheduling module 206 and the communication module 208.

[0044] The computing devices 104a-104b may comprise an input/output controller 306 arranged to output display information to a display device 308 which may be separate from or integral to the computing devices 104a-104b. The display information may provide the geofences, actions of the users deforming in that environment, or for other display purposes. The input/output controller 306 is also arranged to receive and process input from one or more devices, such as a user input device (e.g. a mouse, keyboard, camera, microphone or other sensor). The computing device 104a-104b further comprises a communication interface 310 to initiates interactions with other devices through the network 106a-106b.

[0045] Referring to FIG. 4 is a flow diagram 400, depicting a method for facilitating request and scheduling of transport services in emergency conditions, in some embodiments. As an
option, the method 400 may be carried out in the context of the details of FIG. 1, FIG. 2, and FIG. 3. However, the method 400 may also be carried out in any desired environment. Further, the aforementioned definitions may equally apply to the description below.

[0046] The method commences at step 402, users may be allowed to give input requests in user computing devices during emergency conditions. The input requests may be accepted in the computing devices, at step 404. The users may select required locations in the users computing devices, at step 406. Vehicles may be scheduled based on the selected locations and transmit the scheduled information to vehicle's computing devices, at step 408. The users may be done with payment transactions once the post completion of vehicles scheduled, at step 410. Here, the vehicles may be equipped with oxygen cylinders, wheel chairs, masks and the like. The vehicles may be reached to the user's locations, at step 412. The vehicles may be reached to the selected locations, at step 414.

[0047] Referring to FIG. 5 is an example flow diagram 500, depicting method for scheduling of vehicle in emergency conditions, in some embodiments. As an option, the method 500 may be carried out in the context of the details of FIG. 1, FIG. 2, FIG. 3 and FIG. 4. However, the method 500 may also be carried out in any desired environment. Further, the aforementioned definitions may equally apply to the description below.

[0048] The method commences at step 502, a patient may request an emergency vehicle by giving a single input click in a user's computing device. The patient request may be allowed in the user's computing device, at step 504. The patient may select nearest hospitals in a user's computing device, at step 506. The selected hospital information may be transmitted to a driver in the emergency vehicle from the user's computing device, at step 508. The driver may be reached to the patient location, at step 510. The driver may pick-up the patient in his location, at step 510. The driver may be reached the selected location with the patient, at step 512.

[0049] More illustrative information will now be set forth regarding various optional architectures and uses in which the foregoing method may or may not be implemented, as per the desires of the user. It should be strongly noted that the following information is set forth for illustrative purposes and should not be construed as limiting in any manner. Any of the following features may be optionally incorporated with or without the exclusion of other features described.
[0050] Although the present disclosure has been described in terms of certain preferred embodiments and illustrations thereof, other embodiments and modifications to preferred embodiments may be possible that are within the principles and spirit of the invention. The above descriptions and figures are therefore to be regarded as illustrative and not restrictive.

[0051] Thus the scope of the present disclosure is defined by the appended claims and includes both combinations and sub combinations of the various features described herein above as well as variations and modifications thereof, which would occur to persons skilled in the art upon reading the foregoing description.
CLAIMS

What is claimed is:

1. A system for facilitating request and scheduling of transport services in emergency conditions, comprising:

   at least one user's computing device configured to initiate a request to a vehicle's computing device by an user, wherein the vehicle's computing device configured to allow the request done by the user for scheduling of transport service; and

   at least one request acceptance and scheduling system configured to accept the request done by the user and schedule a vehicle to the user who initiated the request, whereby a plurality of communications established between the user's computing device and the vehicle's computing device by the at least one request acceptance and scheduling system.

2. The system of claim 1, wherein the user's computing device comprises a patient device, a user's device and a person device.

3. The system of claim 1, wherein the vehicle's computing device comprises a driver device, an emergency service provider device and a vehicle's device.

4. The system of claim 1, wherein a database server is configured to receive the tasks from the computing devices.

5. The system of claim 1, wherein the at least one request acceptance and scheduling system comprises a registration module configured to easy access to the users.

6. The system of claim 1, wherein the at least one request acceptance and scheduling system comprises a request module configured to accept the requests made by the users in a plurality of computing devices.
7. The system of claim 1, wherein the at least one request acceptance and scheduling system comprises a scheduling module configured to schedule the vehicles to the users on a recurring basis.

8. The system of claim 1, wherein the at least one request acceptance and scheduling system comprises a communication module configured to establish communications with other computing devices.

9. A method for facilitating request and scheduling of transport services in emergency conditions, comprising:

   allowing a plurality of users to give input requests in a plurality of computing devices, wherein accepting the input requests by the plurality of computing devices and selecting the plurality of locations by the plurality of users in the computing devices; and

   scheduling a plurality of vehicles to the plurality of users based on the selected plurality of locations, wherein receiving the selected locations to a plurality of drivers and reaching the plurality of drivers to the selected locations.

10. A method of claim 9, further comprising a step of arriving the plurality of drivers to a plurality of user locations.
Allow users to give input requests in user computing devices during emergency conditions

Accept the input requests in the user computing devices

Select required locations in the user computing devices by the users

Schedule vehicles based on the selected locations

Perform payment transactions by the users once the post completion of vehicles scheduled

Reach the user's locations by the scheduled vehicles

Reach the vehicles to the selected locations

FIG. 4
500

Request an emergency vehicle by giving single input click in a user's computing device

504

Allow a patient request in the user's computing device

506

Select nearest hospitals in the user's computing device

508

Transmit the selected nearest hospital location to a vehicle's computing device from the user's computing device

510

Reach the patient location

512

Pick-up the patient in his location

514

Reach the driver with the patient to the selected hospital location

FIG. 5
**INTERNATIONAL SEARCH REPORT**

PCT/IB2018/053154

**A. CLASSIFICATION OF SUBJECT MATTER**
G06Q 5/030, G06F 17/30

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06Q, G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practicable, search terms used)

Databases: TotalPatent One, IPO Internal Database

Keywords: ambulance, patient, transport

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No,</th>
</tr>
</thead>
</table>

- **X** document defining the general state of the art which is not considered to be of particular relevance
- **A** later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- **E** earlier application or patent but published on or after the international filing date
- **L** document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- **O** document referring to an oral disclosure, use, exhibition or other means
- **P** document published prior to the international filing date but later than the priority date claimed

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