

LAB REPORT

Submitted by

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Under the Guidance of

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Associate Professor, Department of Networking And Communication

In partial satisfaction of the requirements for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE ENGINEERING

with specialization in Information Technology



SCHOOL OF COMPUTING

COLLEGE OF ENGINEERING AND TECHNOLOGY

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

KATTANKULATHUR - 603203

JUNE 2022



SRM INSTITUTION OF SCIENCE AND TECHNOLOGY KATTANKULATHUR-603203

BONAFIDE CERTIFICATE

Certified that this lab report titled "**Ambulance Booking**" is the bonafide work done by Anshul Toshniwal(RA2011031010081), Sanchal Jain (RA2011031010072), Umesh Siyak(RA2011031010095) who carried out the lab exercises under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other work.

SIGNATURE

Dr.L.N.B.Srinivas

SEPM – Course Faculty

Associate Professor

Department of Networking And Communication

SIGNATURE

Dr. Annapurani K.

HOD of Dept. NWC

Abstract

As in India, a person dies on every tick of the clock so, we have proposed an application that will provide emergency health response to the patient. The main purpose of this project will fill the gap between the patient and ambulance response time. Ambulances are a vital part of emergency medical services. Usually, patients have a finite range of ambulance contacts; thus whenever in an emergency, they find difficulty. With this project, it is proposed that the application would enable the patient to book a ride to the hospital. The patient can locate themselves or can upload their current location as well as their destination location into the application. The system would then show the nearby available ambulances and the patient can choose its appropriate rides by comparing the quotations and distance of every ride over a region. Finally, billing at the end. The project further endeavors to contribute blood inventory-delivery services to the hospitals.

On the other hand, the ambulance driver would get a prompt about the booking made by the patient. The ambulance driver has to confirm the booking made and the application will guide the driver towards the destination. The admin would get all the central information and would control the inquiry and calling functionalities.

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Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	1
Title of Experiment	To identify the Software Project, Create Business Case, Arrive at a Problem Statement
Name of the candidate	Anshul toshniwal
Team Members	Sanchal Jain , Umesh siyak
Register Number	RA2011031010081
Date of Experiment	04-01-2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	

2	Viva	5	
	Total	10	

Staff Signature with date

Aim

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the <title of the project>

Team Members:

S. No	Register No	Name	Role
1	RA2011031010081	Anshul toshniwal	Lead/Rep
2	RA2011031010095	Umesh siyak	Member
3	RA2011031010072	Sanchal jain	Member

Project Title: AMBULANCE BOOKING APP

Project Description : In this system, the User will be able to book an ambulance in advance according to the size of the ambulance and selected hospital, or the user can also book an ambulance for emergency regardless of its size and a random hospital will be allocated to the user.

Business Case

Result

Thus, the project team formed, the project is described, the business case was prepared and the problem statement was arrived.

ONE PAGE BUSINESS CASE TEMPLATE

DATE	01-04-22
SUBMITTED BY	
TITLE / ROLE	
THE PROJECT	



In bullet points, describe the problem this project aims to solve or the opportunity it aims to develop.

This system can be used by users who need to book an ambulance for an emergency as well as for non-emergency services

THE HISTORY

In bullet points, describe the current situation.

Ambulance plays a very crucial role when an accident occurs on the road network or in case of any medical emergency and the need arises to save a human life. Manual booking of an ambulance at times of emergency can take away precious time as it is a time-consuming process. Furthermore, the delay caused due to the heavy traffic congestion in between the pickup spot and the hospital facility may increase the risk of death for the victim.

LIMITATIONS

List what could prevent the success of the project, such as the need for expensive equipment, bad weather, lack of special training, etc.

- Wrong inputs will affect the project outputs.
- Internet Connection is mandatory
- The android mobile user will not be able to insert or view details if the server goes down. Thus, there is disadvantage of single point failure.

APPROACH

List what is needed to complete the project.

The waterfall model is a classical model used in system development life cycle to create a system with a linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in downward fashion. The waterfall approach does not define the process to go back to the previous phase to handle changes in requirement. The

waterfall approach is the earliest approach that was used for software development

BENEFITS

In bullet points, list the benefits that this project will bring to the organization.

- Patients can now book an ambulance for an emergency as well as for non-emergency services. User can keep history of the trips and can view any time
- You can locate the nearest available ambulance and request the same.
- Instantly get the information & contact details of the driver.



Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	2
Title of Experiment	Identification of Process Methodology and Stakeholder Description
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain UMESH SIYAK
Register Number	RA2011031010081
Date of Experiment	19-04-2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description.

Team Members:

Sl No	Register No	Name	Role
1	RA2011031010081		Rep/Member
2	RA2011031010072		Member
3	RA2011031010095		Member

Project Title:

Selection of Methodology

- The waterfall model is a classical model used in system development life cycle to create a system with a linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in downward fashion. The waterfall approach does not define the process to go back to the previous phase to handle changes in requirement. The waterfall approach is the earliest approach that was used for software development

Incorporate information to below table regarding stakeholders of the project [Make use of below examples]

Stakeholder Name	Activity/ Area /Phase	Interest	Influence	Priority (High/ Medium/ Low)

Owners/ Team Members	The individuals who are the owners. Owners are liable for the impacts the organization has, and strategy. They supply capital or equity to the business and have a say in how everything runs.	High	High	1
Supporters/ Investors	Suppliers and vendors sell goods and/or services to a business and rely on it for revenue generation and on-going income.	High	Low	2
Customers/ End Users	They are impacted by the quality of service/products and their values. Provide feedback.	High	Low	3

Result

Thus the Project Methodology was identified and the stakeholders were described.



Department Of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	System, Functional and Non-Functional Requirements of the Project
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain , Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	19-04-2022

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To identify the system, functional and non-functional requirements for the project.

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep/Member
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh Siyak	Member

Project Title: < > AMBULANCE BOOKING APP

System Requirements

Overview

The new system will be used by the dispatcher to handle the dispatching operation. The system allows dispatching the ambulances and also tracking the ambulance location. Major high level functions of the system are described in the following section.

Functional Requirements

This section describes the high level functionality of the Ambulance Dispatch System.

Receiving Incident information from the caller.

When the request for ambulance comes to the operator, he takes information about the incident from the caller. This information is entered into the ambulance dispatch system. This information includes caller phone number, address (any combination of street name, zip code), description/nature of the incident, number of people involved in the incident. If

the caller does not know the exact address of the patient, it is found using an external system.

This external system determines the incident address depending on the caller's phone number.

With this information a new incident is created in the ambulance dispatch system with all the details. The information added to this incident is called "incident information".

Locating nearest ambulance.

Depending on the location of the incident, this function will determine the nearest 3 available ambulances.

Allocating the ambulance to the incident.

Depending on the number of people involved in the incident, dispatcher will allocate the ambulance/s to the incident and add the ambulance details to the system. One ambulance is assigned to each person injured.

Dispatch of ambulance and resource.

Once the ambulance is allocated to the incident, dispatcher will use the system to send the notification, incident information and the details of the nearest hospital to ambulance personnel. This information is also called "allocation information". A geographical search of the place around which the incident has taken place will help the dispatcher find the nearest hospital.

The ambulance personnel can view this allocation information assigned to him on an LCD display inside the ambulance.

Finding the route to the incident

Once the allocation information is sent to the ambulance personnel, he can get the route information to the incident using an external GPS system. Ambulance personnel can view the route on his LCD screen inside the ambulance.

Once the ambulance personnel reach the incident location, route to the nearest hospital is also shown on his LCD screen using external GPS system.

Logging and Reporting of incidents.

Supervisors can use the ambulance dispatch system, to get reports and details on each incident.

Displaying timing information and error reporting.

The ambulance dispatch system will calculate and display the time required to dispatch the ambulance for each incident. The time has to be less than 3 minutes.

Also, if no ambulance is available for 11 minutes, the dispatch system will generate exception messages. When an exception is created, a person intervenes and takes care of it.

Tracking and monitoring of ambulance.

This functionality allows dispatcher to track the status of the ambulance. Once the job is completed, the system informs the dispatcher that the job has been executed.

The status of each ambulance is then updated as required.

Manage Users

This functionality allows supervisors to maintain the system and add/remove/update new users for the system. Each user (Dispatcher) will have username and password assigned to him.

External Systems:

The ambulance dispatch system will interact with some external systems which are described below:

Address Locator:

The address locator will try to locate the address of the incident, when the caller cannot give the exact details of the location.

GPS:

GPS system will be used to get the route details and directions to the incident location. These details will be used by ambulance personnel to reach the incident location. The GPS system also gives information about the nearest hospital to the incident location.

Assumptions:

- **The operator and the dispatcher are assumed to be the same person in this system.**
- **Creating an exception will solve the problem, when an ambulance cannot be found. It will be diverted to the third party who will take care of the situation.**

Non-Functional Requirements

Usability

Ambulance Dispatch System shall provide mouse and keyboard navigation.

Ambulance Dispatch System shall be easy to navigate by using clear words, menus and drop-down lists.

Ambulance Dispatch System shall be accompanied with a user manual.

Reliability

Ambulance Dispatch System shall be available 24 hours a day for application users.

Performance

Ambulance Dispatch System shall not take longer than 15 seconds to respond to a page request for members; when using an internet connection that is 56k or higher

Supportability

The ambulance dispatch system application should be supportable in current equipment such as computers, monitors, printers etc.

Implementation

**The software implementation will be performed on Friday evening to minimize impact.
The implementation will be performed all on one day rather than in phases.**

Interface

Ambulance Dispatch System shall be accessible through a web browser such as Internet Explorer 5 or higher and Netscape Navigator 4.7 or higher

Ambulance Dispatch System shall provide printer friendly outputs of reports so that users can have easy to read print outs of the reports.

Packaging

The application is internal department use only and will not be packaged and sold as a retail product.

Legal

This web site is for Department of Ambulance Dispatch System, and there are no subscriptions, membership fees. Department of Ambulance Dispatch System would appreciate the cooperation in reporting discrepancies and to not misuse or damage any of the functionality, information or contents of this internal use service web page. No external/external party may make an offer to sell or buy this website on behalf of a third party.

If any provision of this agreement is held to be invalid or unenforceable, such provision shall be struck and the remaining provisions shall be enforced. Headings are for reference purposes only.

Result

Thus the requirements were identified and accordingly described.



Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	4
Title of Experiment	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain , Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

Team Members:

Sl No	Register No	Name	Role
1	Anshul Toshniwal	RA2011031010081	Lead
2	Sanchal Jain	RA2011031010072	Member
3	Umesh Siyak	RA2011031010095	Member

Requirements

<Incorporate the Project plan template>

Result:

Thus, the Project Plan was documented successfully.

1. Project Management Plan

Describe the key issues driving the project. [Min 3 Focus Areas]

Focus Area	Details
Integration Management	<p>Governance Framework</p> <p>Government framework can help us in a major way as todays government encourages youth for startup, and as our project is an emergency service app .</p> <p>Project Team Structure</p> <p>UX designing, FRONTEND,BACKEND</p> <p>Roles & Responsibilities of Team</p> <p>Sanchal Jain-FRONTEND AND BACKEND DEVELOPER</p> <p>Umesh Siyak- FRONTEND DEVELOPER AND UX DESIGNER</p> <p>Anshul Toshniwal - PROJECT MANAGER</p> <p>Change Management</p> <p>(Change Control, Issue Management)</p> <p>Project Closure</p>
Scope Management	<p>Brainstorming</p> <p>Document Analysis</p> <p>Focus Group</p> <p>Interface analysis</p> <p>Interview</p> <p>Observation</p> <p>Prototyping</p>
Cost Management	<p>Estimate Effort</p> <p>Assign Team</p> <p>Budget Control</p>

Quality Management	<p>Quality Assurance: Quality assurance will be managed including governance, roles and responsibilities, tools and techniques and reporting</p> <p>Quality Control: Specify the mechanisms to be used to measure and control the quality of the work products</p>
Resource Management	<p>Fast internet connection</p> <p>Fast working laptops with fast processors</p> <p>React.js for front end development</p>
Stakeholder	<p>Owner</p> <p>Sponsor</p> <p>Team Members</p> <p>Project Managers</p>
Communication Management	<p>Collection and analysis of data</p> <p>Creation of messages for communication</p> <p>Transmission or distribution of communications</p> <p>Storage of any communication reports, files, or documents</p> <p>Retrieval of any stored communications</p> <p>Disposal of any old communications upon project closure or a set date</p>
Risk Management	Identifying, analysing, and prioritizing project risks
Procurement Management	Adhering to organization procurement process

2. Estimation

2.1. Effort and Cost Estimation

Activity Description	Sub-Task	Sub-Task Description	Effort (in)	Cost in

			hours)	INR
Design the user screen	E1R1A1T1 (Effort- Requirement- Activity-Task)	Confirm the user requirements (acceptance criteria)	6	3000
	E1R1A1T2		2	1000
	E1R1A1T3		3	1500
Identify Data Source for displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	8	4000
		Document	2	1000

Effort (hr)	Cost (INR)
1	500

2.2. Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

Infrastructure Requirement	Qty	Cost per qty	Cost per item
IR1			
IR2			

2.3 Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin Developer , Support Consultant	3	2,000,000	6,000,000
License	Operating System	10	10000	100,000

	Database Middleware IDE			
Infrastructures	Server, Storage and Network	20	20000	400,000

3. Project Team Formation

3.1. Identification Team members

Name	Role	Responsibilities
Anshul Toshniwal	Key Business User (Product Owner)	Provide clear business and user requirements
Sanchal Jain	Project Manager	Manage the project
Umesh Siyak	Business Analyst	Discuss and Document Requirements
Anshul Toshniwal	Technical Lead	Design the end-to-end architecture
Sanchal Jain	UX Designer	Design the user experience
Umesh Siyak	Frontend Developer	Develop user interface
Anshul Toshniwal	Backend Developer	Design, Develop and Unit Test Services/API/DB
Sanchal Jain	Cloud Architect	Design the cost effective, highly available and scalable architecture
Umesh Siyak	Cloud Operations	Provision required Services
Anshul Toshniwal	Tester	Define Test Cases and Perform Testing

3.2. Responsibility Assignment Matrix

RACI Matrix		Team Members		
Activity		Name (BA)	Name (Developer)	Name (Project Manager)
User Requirement Documentation	A	C/I	I	R
	Anshul Toshniwal	Sanchal Jain	Anshul Toshniwal	Umesh Siyak

A	Accountable
R	Responsible
C	Consult
I	Inform

Reference

1. <https://www.pmi.org/>
2. <https://www.projectmanagement.com/>
3. <https://www.tpsgc-pwgsc.gc.ca/biens-property/snpg-npms/ti-it/ervcpgrpm-dsfvpmpmpt-eng.html>



Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	5
Title of Experiment	Prepare Work breakdown structure, Timeline chart, Risk identification table
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal jain, umesh siyak
Register Number	RA2011031010081
Date of Experiment	

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To Prepare Work breakdown structure, Timeline chart and Risk identification table

Team Members:

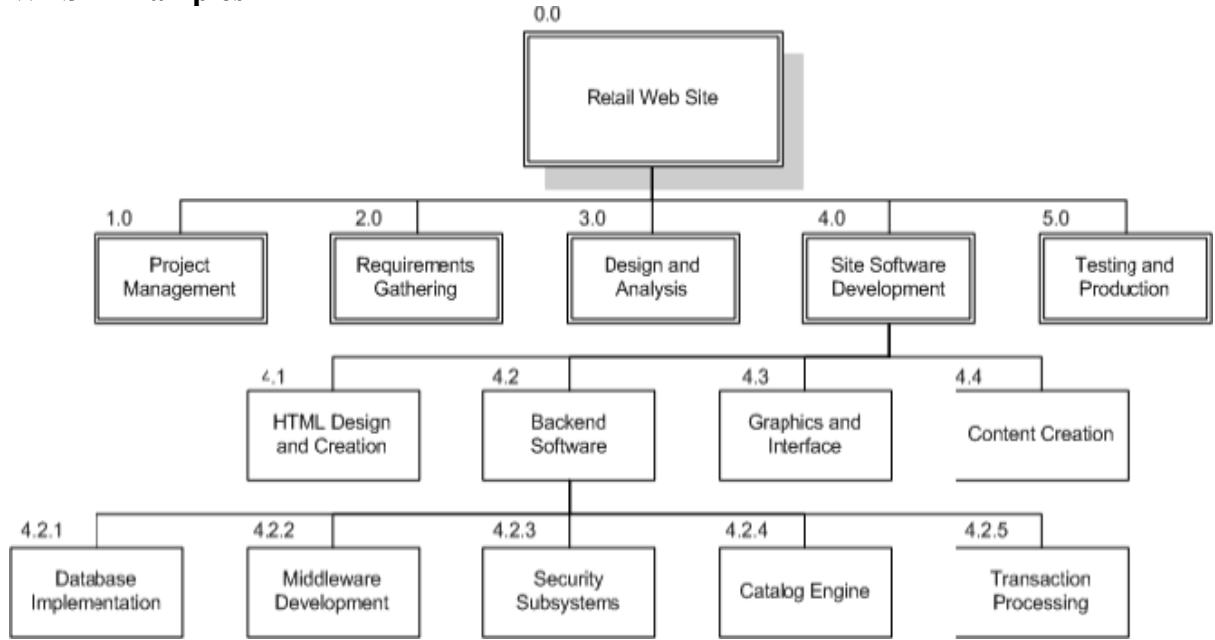
Sl No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep
2	RA2011031010072	Sanchal jain	Member
3	RA2011031010095	umesh siyak	Member

<Incorporate WBS, Timeline chart and Risk table>

Result:

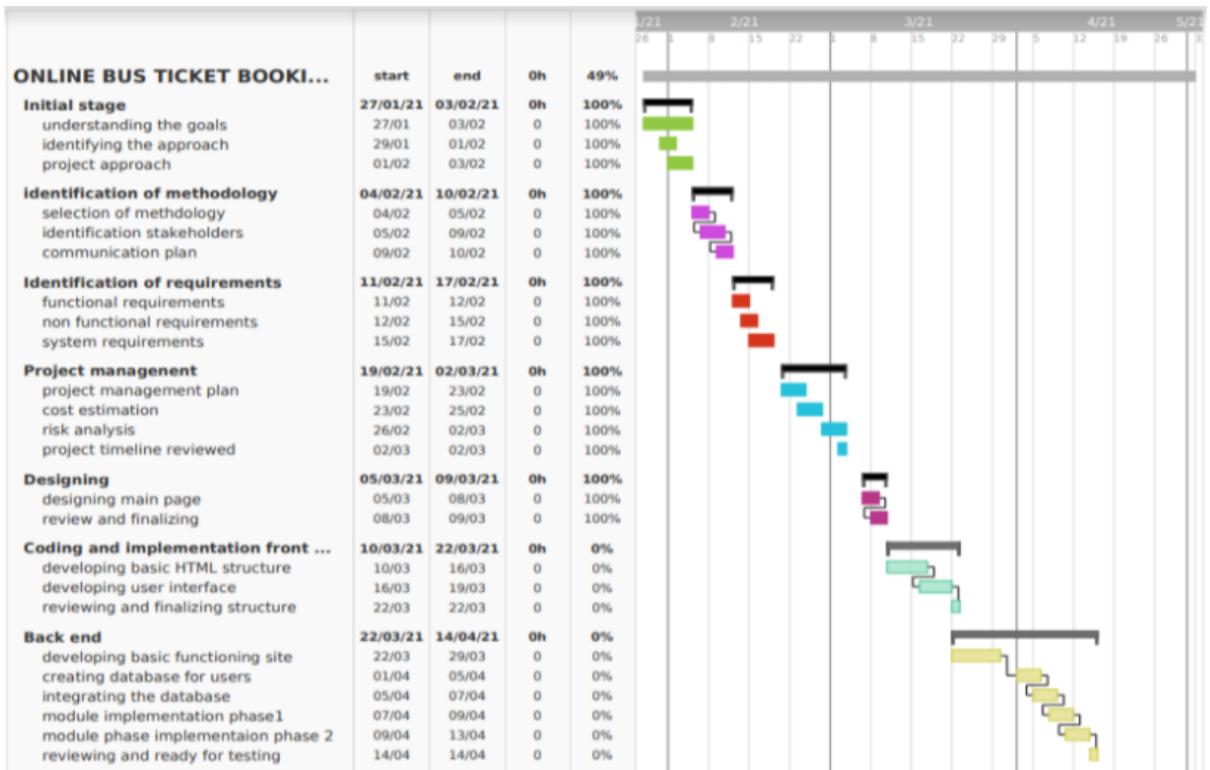
Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.

WBS – Examples



- 0.0 Retail Web Site
- 1.0 Project Management
- 2.0 Requirements Gathering
- 3.0 Analysis & Design
- 4.0 Site Software Development
 - 4.1 HTML Design and Creation
 - 4.2 Backend Software
 - 4.2.1 Database Implementation
 - 4.2.2 Middleware Development
 - 4.2.3 Security Subsystems
 - 4.2.4 Catalog Engine
 - 4.2.5 Transaction Processing
 - 4.3 Graphics and Interface
 - 4.4 Content Creation
- 5.0 Testing and Production

TIMELINE – GANTT CHART



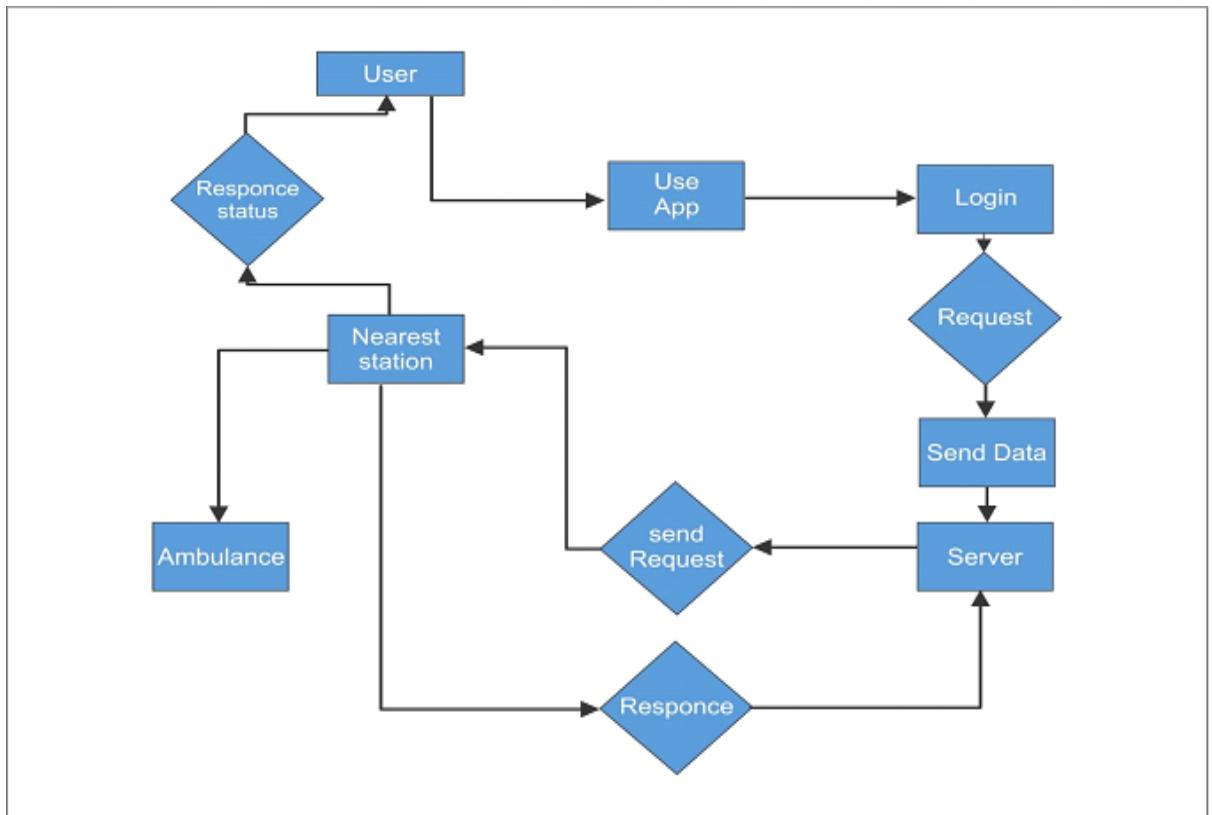
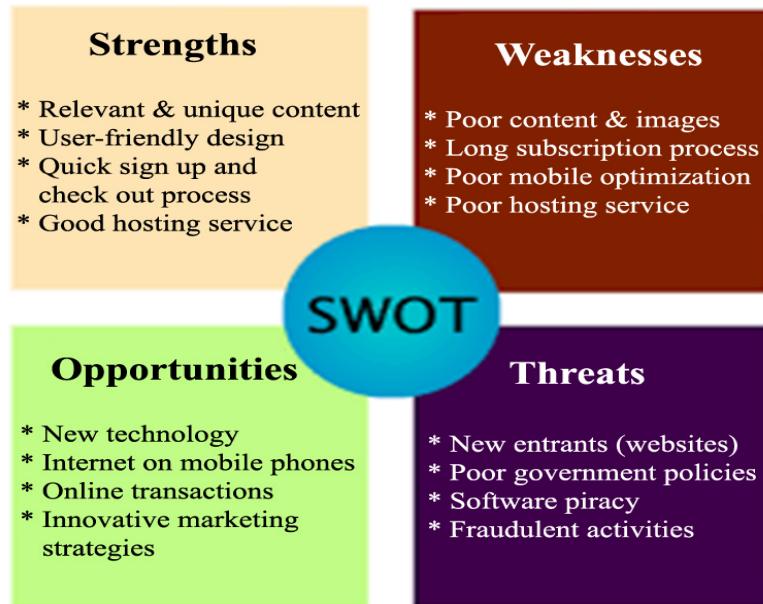


Figure 1.2 Extended View of General Process Diagram

RISK ANALYSIS – SWOT & RMMM

RISK ANALYSIS – SWOT & RMMM



Strengths	Weaknesses	Opportunities	Threats
Rated as high for ease of use	Need to manage rapid growth	HiTech financial incentives	Competitors with more resources and name recognition
Lower costs compared to competitors	Decreasing efficiency	Need for data metrics to define quality	New government regulations
Innovative culture of healthcare service	Increased leverage till last year, weak profitability	New payment models motivate practitioners to find efficient way to collect revenue	Strong competitions



Risk Management Framework- Risks And Mitigation ...

Response	Strategy	Examples
Avoid	Risk avoidance is a strategy where the project team takes action to remove the threat of the risk or protect from the impact	<ul style="list-style-type: none">Extending the scheduleReducing/removing scopeChange the execution strategy
Transfer	Risk transference involves shifting or transferring the risk threat and impact to a third party. Rather transfer the responsibility and ownership	<ul style="list-style-type: none">Purchasing insurancePerformance bondsWarrantiesContract issuance (lump sum)
Mitigate	Risk mitigation is a strategy where the project team takes action to reduce the probability of the risk occurring. This does not risk or potential impact , but rather reduces the likelihood of it becoming real.	<ul style="list-style-type: none">Increasing testingChanging suppliers to a more stable oneReducing process complexity
Accept	Risk acceptance means the team acknowledges the risk and its potential impact, but decides not to take any preemptive action to prevent it. It is dealt with only if it occurs.	<ul style="list-style-type: none">Contingency reserve budgetsManagement schedule floatEvent contingency

Slide 1 of 5

RISK MANAGEMENT FRAMEWORK:

- Schedule can extend as some new programs needs to be learned
- execution strategy may be changed as it depends on the current market
- if some other application similar to ours is launched in the market before our application ,success of our application may decrease as competition will increase
-
- we will increase testing for better user experience
- we will make strategy to reduce process complexity it will be good for user
- Budget shall increase as project proceeds therefore we will keep some amount from budget as reserved amount for future
- Time taken to do this project may increase ,if any problem occurs



Department of Networking and Communications

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	6
Title of Experiment	Design a System Architecture, Use Case and Class Diagram
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain, Umesh siyak
Register Number	RA2011031010081
Date of Experiment	11-05-22

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To Design a System Architecture, Use case and Class Diagram

Team Members:

Sl No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh siyak	Member

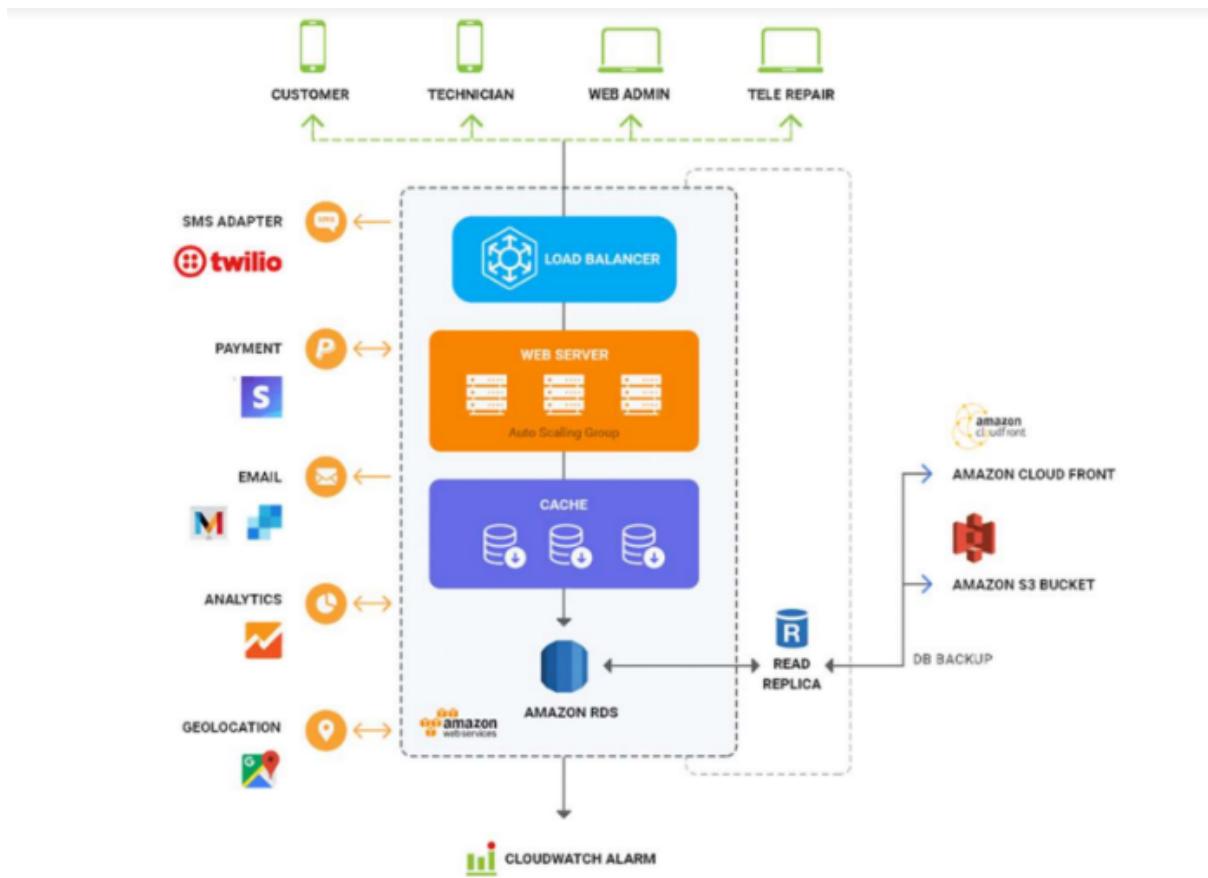
Requirements

<System Architecture, Use Case and Class Diagram>

Result:

Thus, the system architecture, use case and class diagram created successfully.

SYSTEM ARCHITECTURE – Example



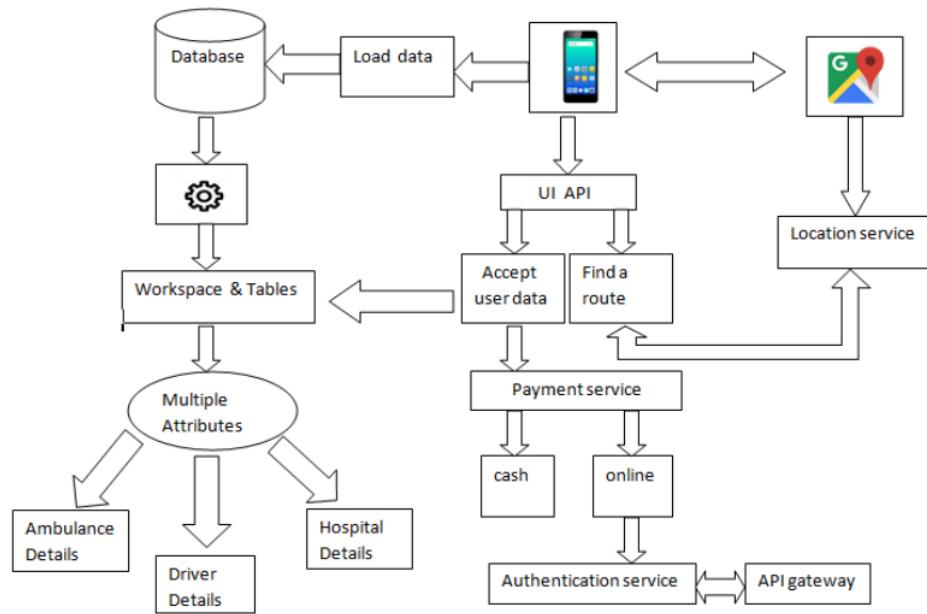
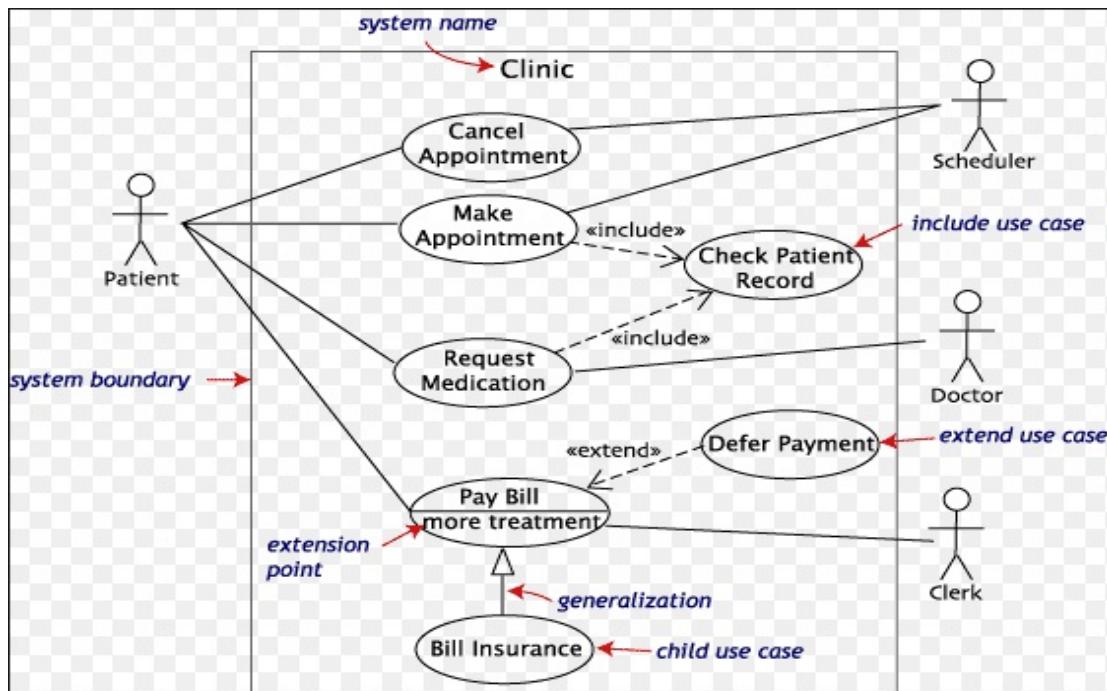
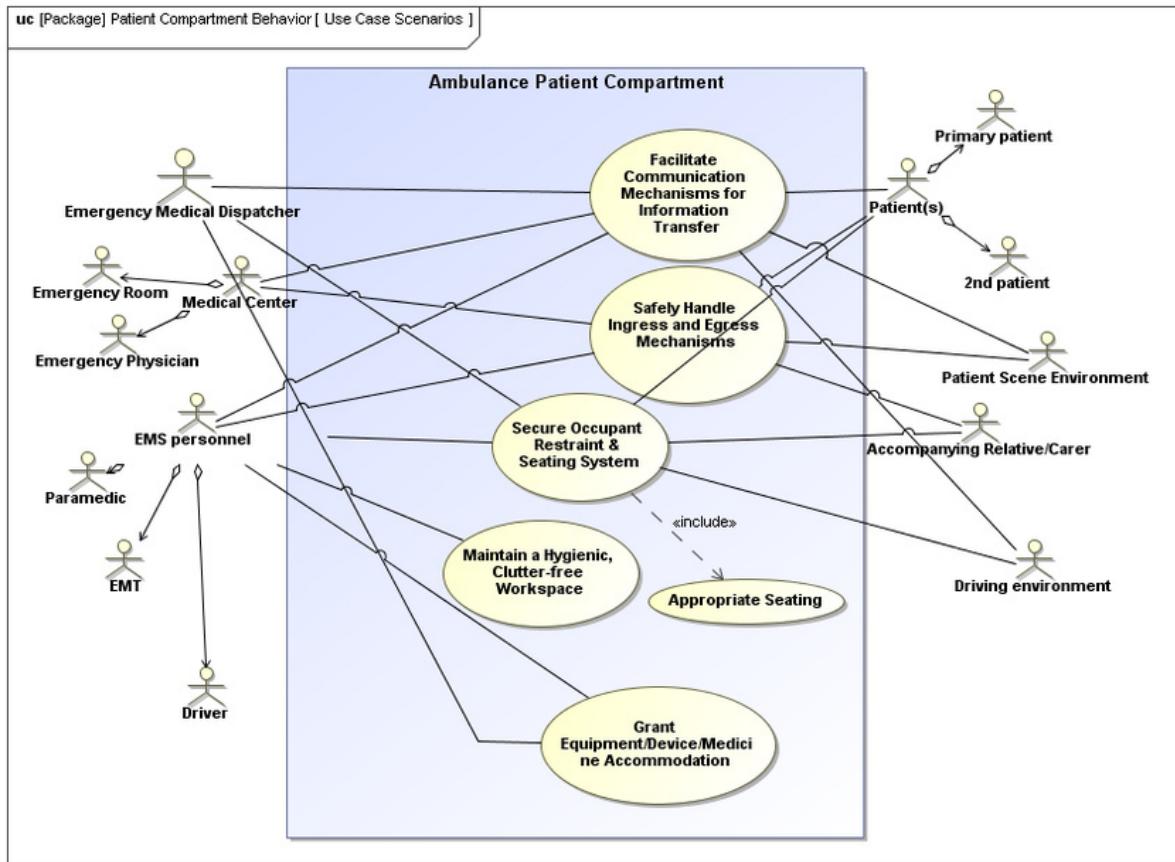


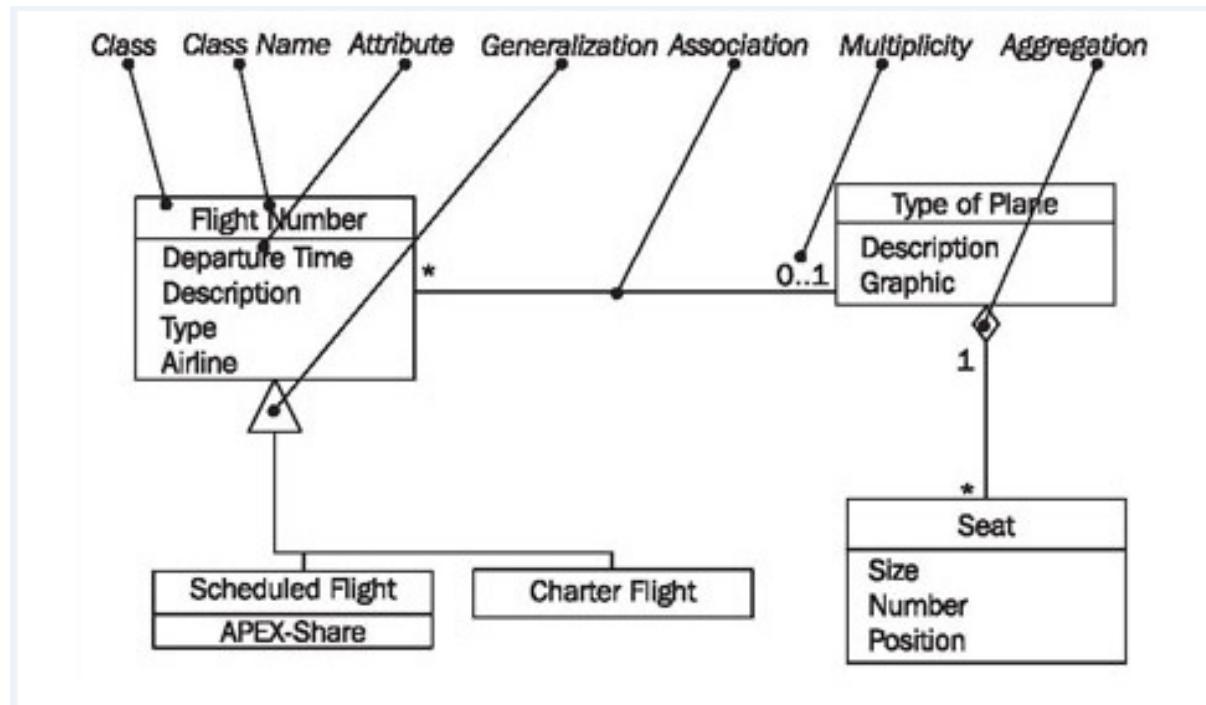
Fig -1: Block Diagram

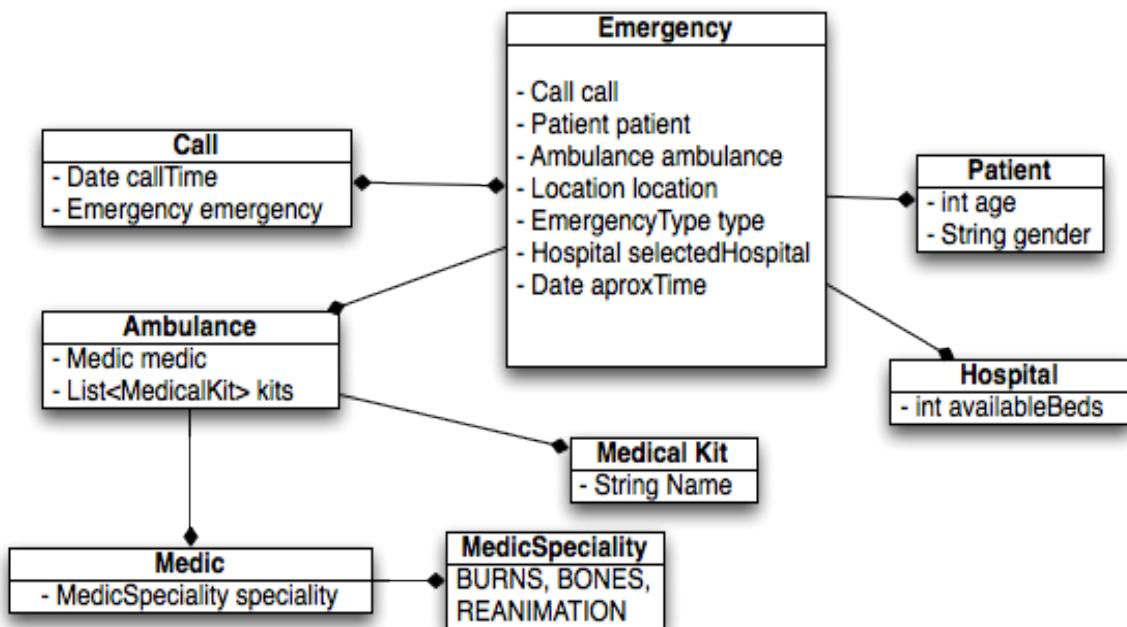
USE CASE DIAGRAM – Example





CLASS DIAGRAM – Example







School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	7
Title of Experiment	Design a Entity relationship diagram
Name of the candidate	ANSHUL TOSHNIWAL
Team Members	UMESH SIYAK,, SANCHAL JAIN
Register Number	RA2011031010081
Date of Experiment	1-6--22

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To create the Entity Relationship Diagram

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	ANSHUL TOSHNIWAL	Rep
2	RA2011031010095	UMESH SIYAK	Member
3	RA2011031010072	SANCHAL JAIN	Member

<ER Diagram >

Result:

Thus, the entity relationship diagram was created successfully.

***/ ER Diagram, Notation and Example**

What is ER Diagram?

- ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

- ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.

- At first look, an ER diagram looks very similar to the flowchart. However, ER Diagram includes many specialized symbols, and its meanings make this model unique. The purpose of ER Diagram is to represent the entity framework infrastructure.

What is ER Model?

- ER Model stands for Entity Relationship Model is a high-level conceptual data model diagram. ER model helps to systematically analyze data requirements to produce a well-designed database.
- ER Model represents real-world entities and the relationships between them. Creating an ER Model in DBMS is considered as a best practice before implementing your database.
- ER Modeling helps you to analyze data requirements systematically to produce a well-designed database. So, it is considered a best practice to complete ER modeling before implementing your database.

Why use ER Diagrams?

Here, are prime reasons for using the ER Diagram

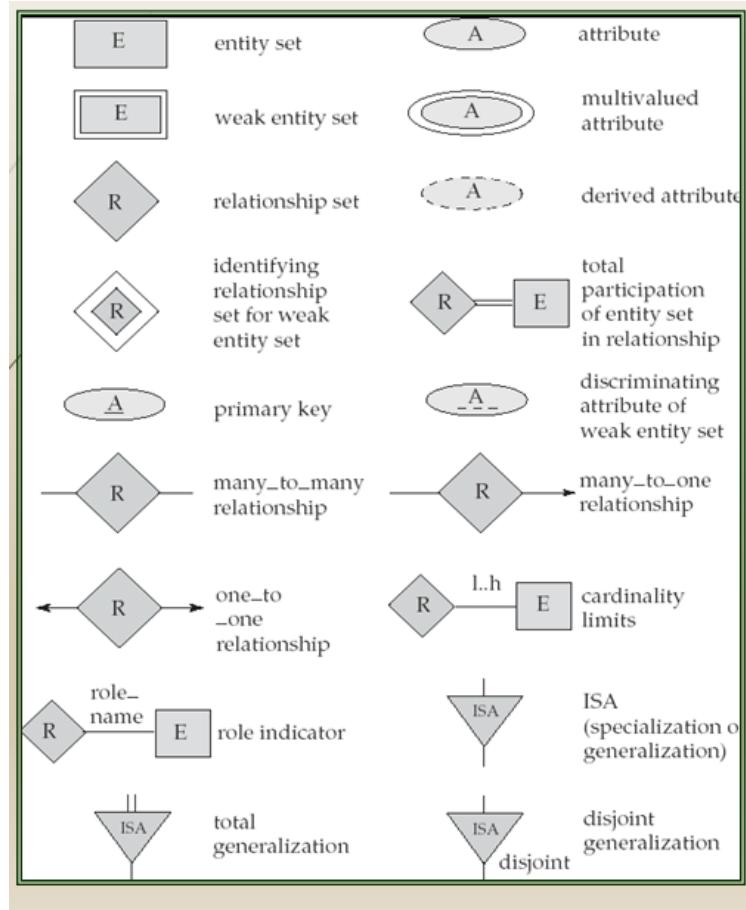
- Helps you to define terms related to entity relationship modeling
- Provide a preview of how all your tables should connect, what fields are going to be on each table
- Helps to describe entities, attributes, relationships
- ER diagrams are translatable into relational tables which allows you to build databases quickly
- ER diagrams can be used by database designers as a blueprint for implementing data in specific software applications
- The database designer gains a better understanding of the information to be contained in the database with the help of ERP diagram
- ERD Diagram allows you to communicate with the logical structure of the database to users

Components of the ER Diagram

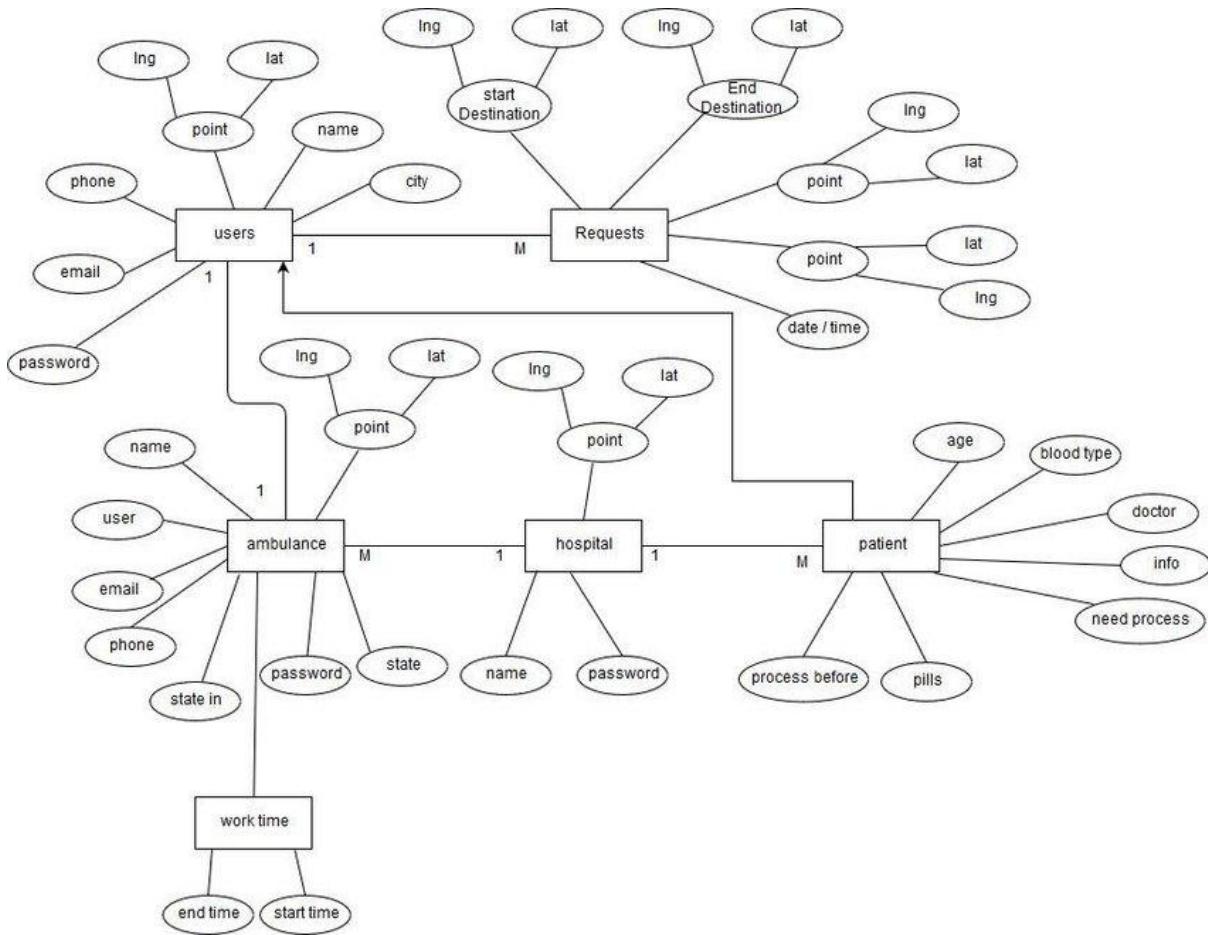
This model is based on three basic concepts: Entities, Attributes, Relationships

ER Diagram – Notations

- Rectangles represent entity sets.
- Diamonds represent relationship sets.
- Lines link attributes to entity sets and entity sets to relationship sets.
- Ellipses represent attributes
- Double ellipses represent multivalued attributes.
- Dashed ellipses denote derived attributes.
- Underline indicates primary key attributes



ER Diagram of AMBULANCE BOOKING APP



ADDITIONAL NOTES

- A database can be modeled as a collection of entities, relationship among entities.
- An entity is an object that exists and is distinguishable from other objects.
Example: specific person, company, event, plant
- Entities have attributes.
Example: people have names and addresses
- An entity set is a set of entities of the same type that share the same properties.
Example: set of all persons, companies, trees, holidays
- Express the number of entities to which another entity can be associated via a relationship set.
- Most useful in describing binary relationship sets.
- We express cardinality constraints by drawing either a directed line (->), signifying “one,” or an undirected line (—), signifying “many,” between the relationship set and the entity set.
- An entity is represented by a set of attributes, that is descriptive properties possessed by all members of an entity set.
Example: customer = (customer-id, customer-name, customer-street, customer-city)
loan = (loan-number, amount)
- Domain – the set of permitted values for each attribute
- Attribute types:

1. Simple and composite attributes.
2. Single-valued and multi-valued attributes
E.g. multivalued attribute: phone-numbers
3. Derived attributes-Can be computed from other attributes
E.g. age, given date of birth

Cardinality

- For a binary relationship set the mapping cardinality must be one of the following types:
 1. One to one
A customer is associated with at most one loan via the relationship borrower. A loan is associated with at most one customer via borrower
 2. One to many
A loan is associated with at most one customer via borrower, a customer is associated with several (including 0) loans via borrower
 3. Many to one
A loan is associated with several (including 0) customers via borrower, a customer is associated with at most one loan via borrower
 4. Many to many
A loan is associated with several (including 0) customers via borrower, a customer is associated with several loans (including 0) via borrower

Weak Entity Set

- An entity set that does not have a primary key is referred to as a weak entity set and represented by double outlined box in E-R diagram.
- Example : Consider the entity set payment which got three attributes : payment_number, payment_date and payment_amount. Payment numbers are sequential starting from 1 generally separately for each loan. Although each payment entity is distinct, payments for different loans may share the same payment number. Thus this entity set does not have a primary key.

Discriminator

- The discriminator (or partial key) of a weak entity set is the set of attributes that distinguishes among all the entities of a weak entity set
- Example: discriminator of weak entity set payment is the attribute payment_number since for each loan a payment number uniquely identifies one single payment for that loan.

Specialization-Generalization-ISA

- E-R model provides means of representing these distinctive entity groupings
- Process of designating subgroupings within an entity set is called specialization depicted by triangle component labelled ISA ("is a")
- Bottom up design process in which multiple entity sets are synthesized into higher level entity set - Generalization
- ISA relationship may also be referred to as superclass-subclass relationship
- Higher and lower level entity sets are designated by the terms superclass and subclass.
- Specialization and generalization are simple inversions of each other; they are represented in an E-R diagram in the same way.

Total & Partial Participation

- Total participation (indicated by double line): every entity in the entity set participates in at least one relationship in the relationship set

E.g. participation of loan in borrower is total, every loan must have a customer associated to it via borrower

- Partial participation: some entities may not participate in any relationship in the relationship set

Example: participation of customer in borrower is partial

Cardinality limits

- Cardinality limits can also express participation constraints

- Minimum and maximum cardinality is expressed as l..h where l is the minimum and h is the maximum cardinality

- Minimum value of 1 indicates total participation of entity set in relationship set

- Maximum value of 1 indicates entity participates in atmost one relationship set.

- Maximum value of * indicates no limit

Role indicator

- Entity sets of a relationship need not be distinct

- The labels “manager” and “worker” are called roles; they specify how employee entities interact via the works-for relationship set.

- Roles are indicated in E-R diagrams by labeling the lines that connect diamonds to rectangles.

- Role labels are optional, and are used to clarify semantics of the relationship

Disjoint Generalization

- Disjointness constraint requires that an entity belong to more than one lower level entity set.

Example: account entity can satisfy only one condition for account_type attribute ; entity can either be savings or chequing account but not both.



School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	8
Title of Experiment	Develop a Data Flow Diagram (Process-Up to Level 1)
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain, Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	1-06-2022

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To develop the data flow diagram up to level 1 for the <project name>

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh Siyak	Member

<DFD >

Result:

Thus, the data flow diagrams have been created for the <project name>.

Data Flow Diagram

The DFD takes an input-process-output view of a system. That is, data objects flow into the software, are transformed by processing elements, and resultant data objects flow out of the software. Data objects are represented by labeled arrows, and transformations are represented by circles (also called bubbles). The DFD is presented in a hierarchical fashion. That is, the first data flow model (sometimes called a level 0 DFD or context diagram) represents the system as a whole. Subsequent data flow diagrams refine the context diagram, providing increasing detail with each subsequent level.

The data flow diagram enables you to develop models of the information domain and functional domain. As the DFD is refined into greater levels of detail, you perform an implicit functional decomposition of the system. At the same time, the DFD refinement results in a corresponding refinement of data as it moves through the processes that embody the application.

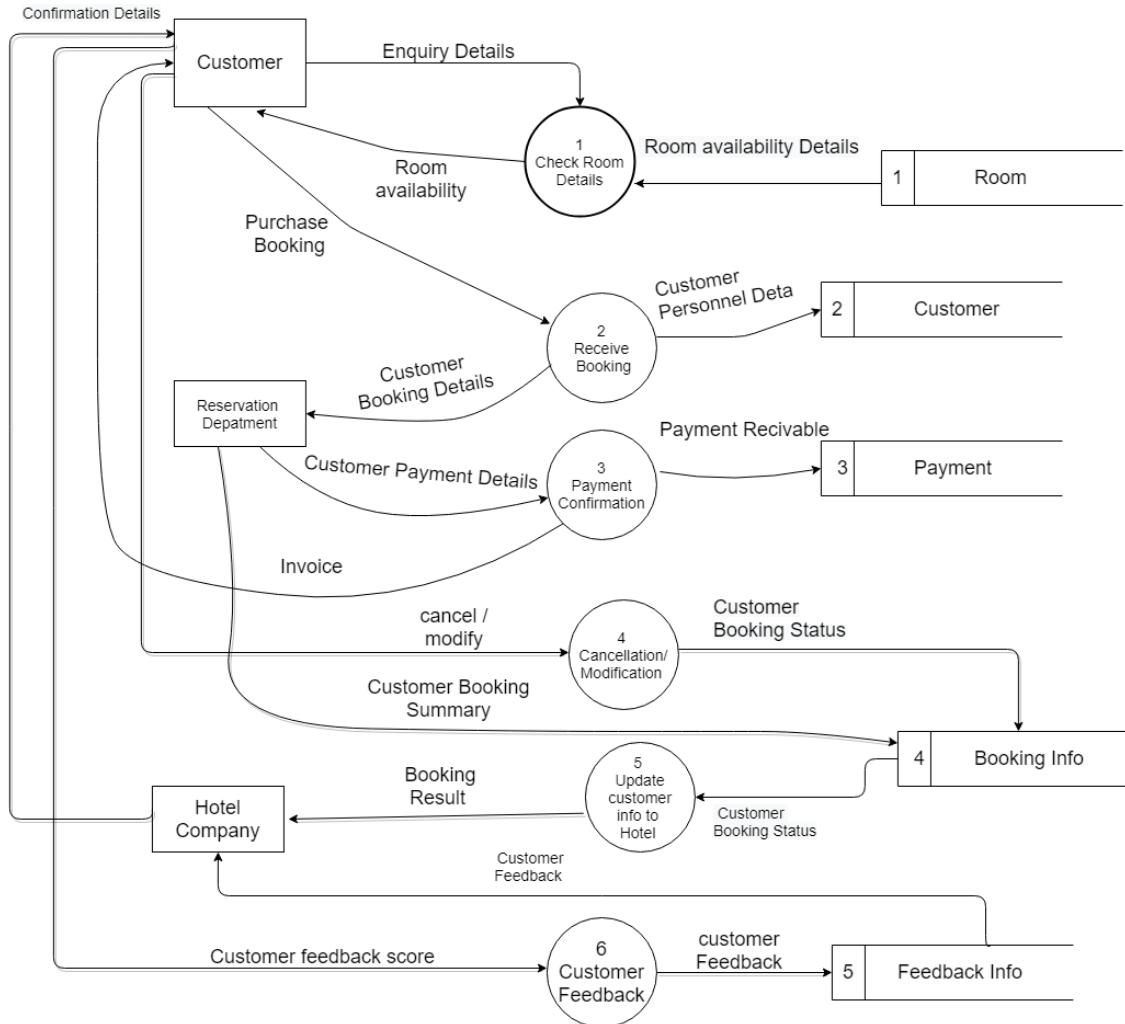
A few simple guidelines can aid immeasurably during the derivation of a data flow diagram:

- (1) Level 0 data flow diagram should depict the software/system as a single bubble;
- (2) Primary input and output should be carefully noted;
- (3) Refinement should begin by isolating candidate processes, data objects, and data stores to be represented at the next level;
- (4) All arrows and bubbles should be labeled with meaningful names;

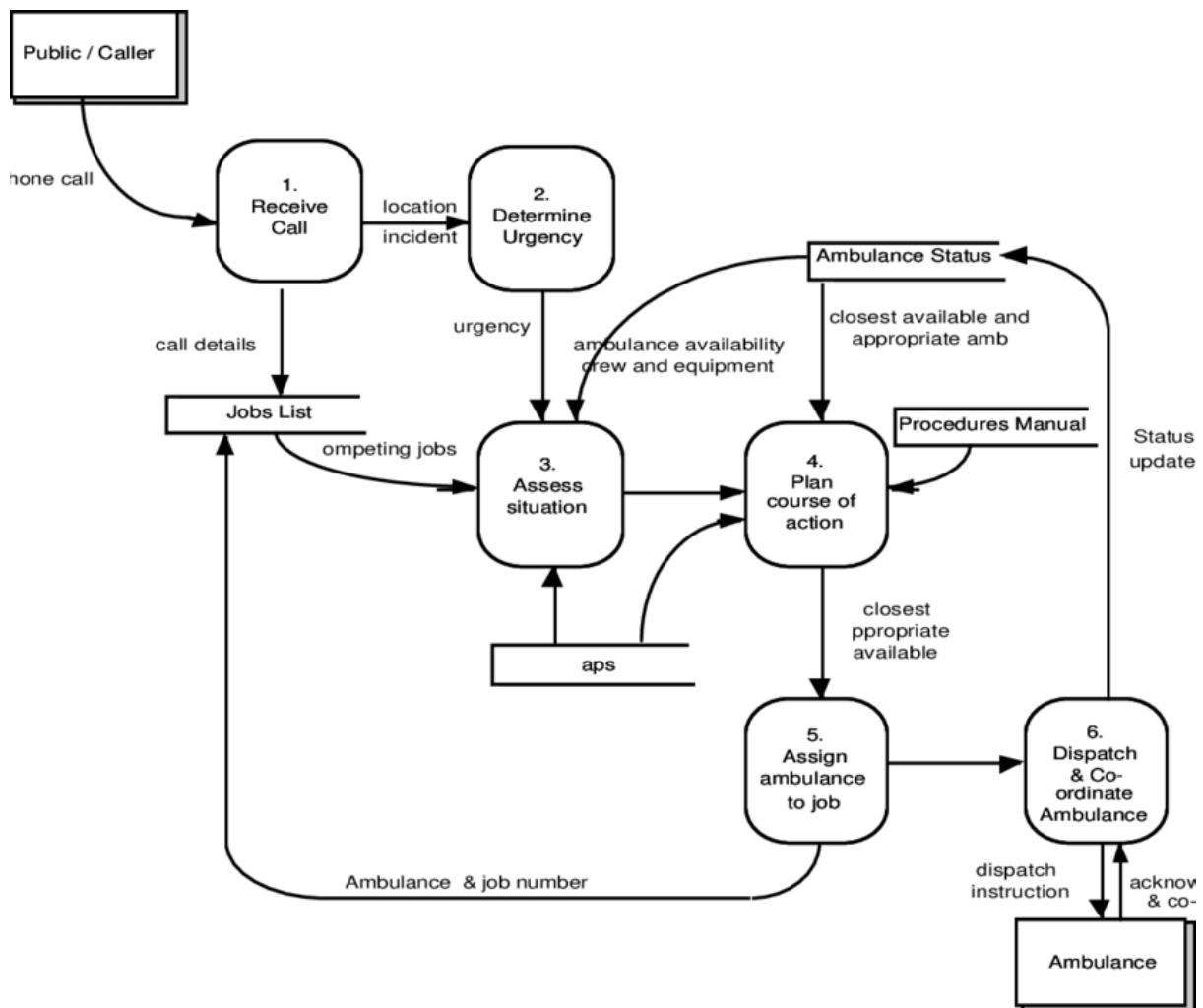
- (5) Information flow continuity must be maintained from level to level and
 (6) One bubble at a time should be refined. There is a natural tendency to overcomplicate the data flow diagram. This occurs when you attempt to show too much detail too early or represent procedural aspects of the software in lieu of information flow.

*/ For Example

DFD Level 0



DFD Level 1





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Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	9
Title of Experiment	Design a Sequence and Collaboration Diagram
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain , Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	6-15-22

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To create the sequence and collaboration diagram for the <project name>

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep/Member
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh Siyak	Member

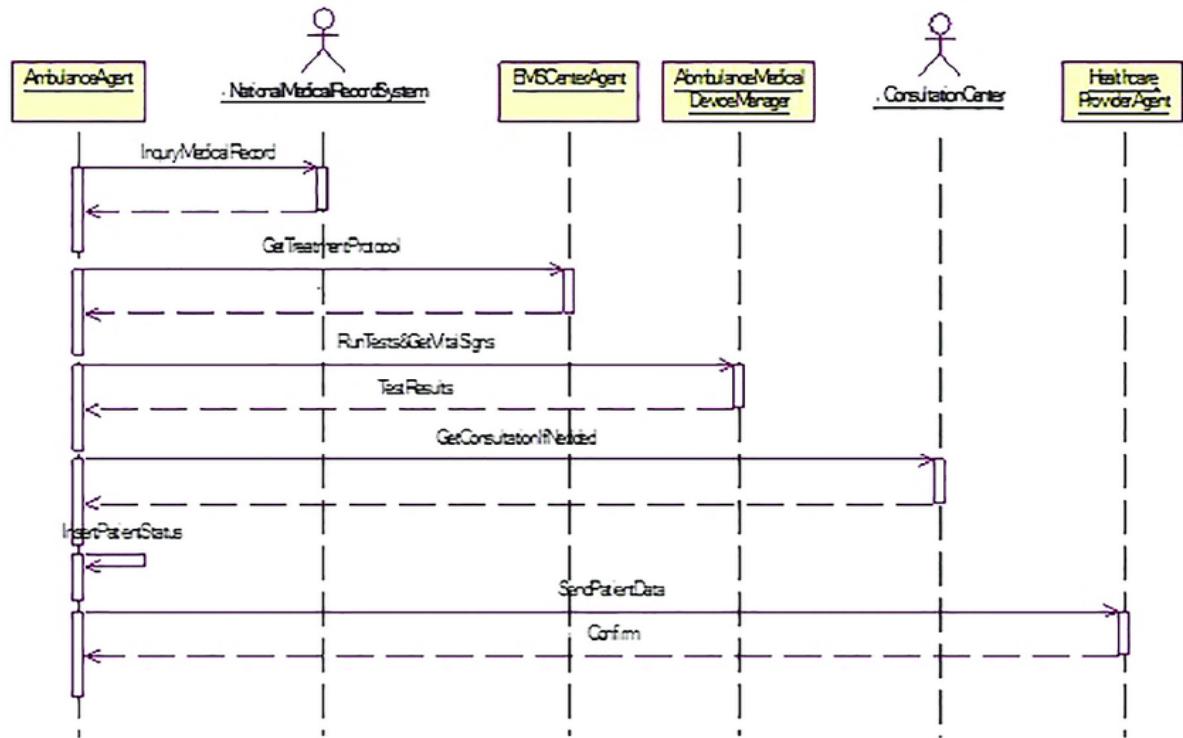
<Sequence and Collaboration Diagram>

Result:

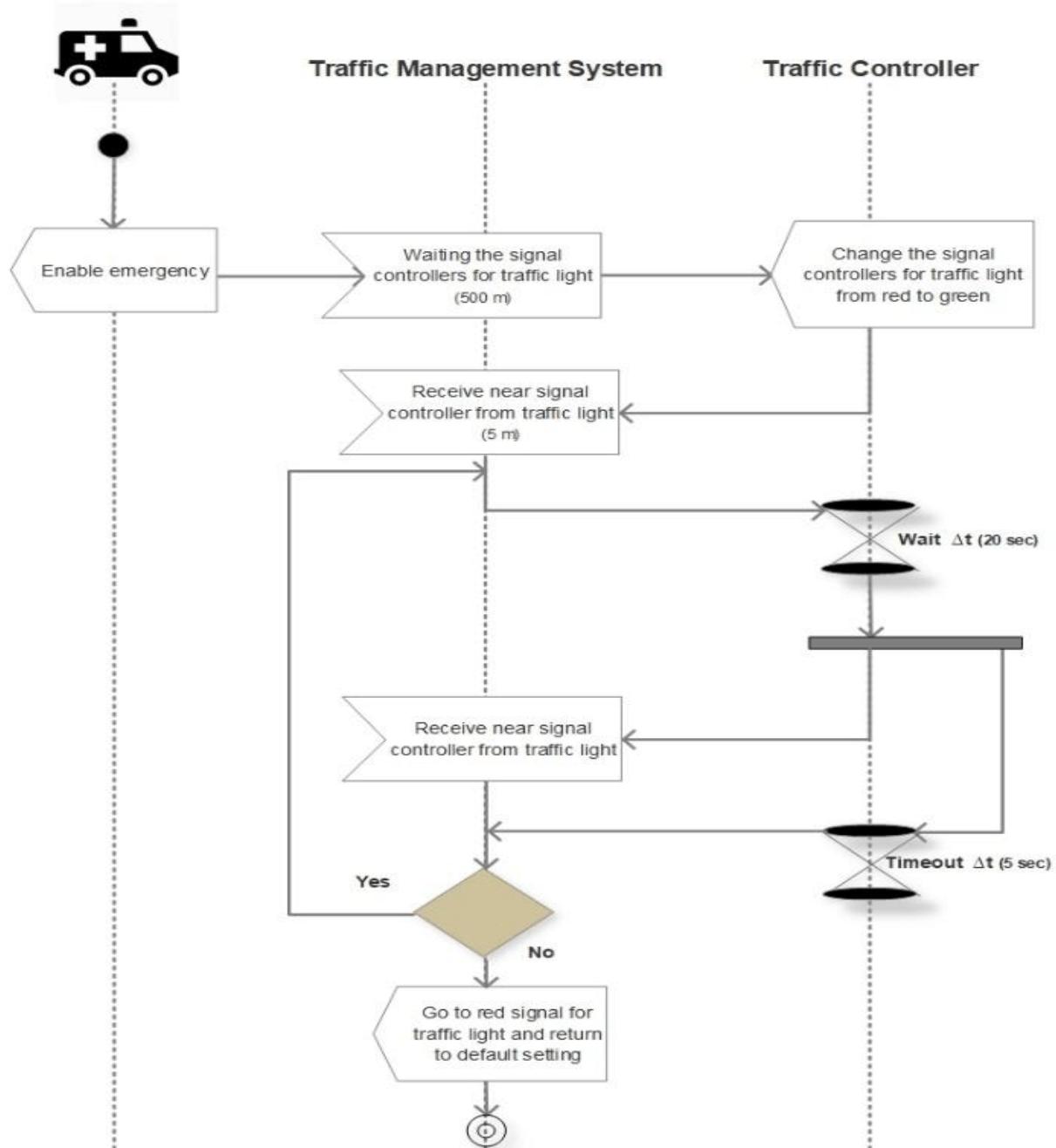
Thus, the sequence and collaboration diagrams were created for the <project name>.

*/ For Example

Sequence Diagram



Collaboration Diagram





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Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	10
Title of Experiment	Develop a Testing Framework/User Interface
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain, Umesh siyak
Register Number	RA2011031010081
Date of Experiment	15-6-22

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To develop the testing framework and/or user interface framework for the <project name>

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep/Member
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh siyak	Member

<Incorporate the necessary information regarding testing/user interface of the project>

Result:

Thus, the testing framework/user interface framework has been created for the <project name>.

***/ For example**

Executive Summary

<<defines the scope, objective, and approach to test the software application>>

Test Plan

Scope of Testing

<<summarize the scope of testing >

Functional: Are all modules covered? Any exception for any modules ? Does automation cover all functional test cases or Regression – Critical Path Test Cases ?

Non-Functional: Are all NFR (Non-Functional Requirements) covered?

Types of Testing, Methodology, Tools

Functional requirements

This section describes the high level functionality of the Ambulance Dispatch System.

Receiving Incident information from the caller.

When the request for ambulance comes to the operator, he takes information about the incident from the caller. This information is entered into the ambulance dispatch system. This information includes caller phone number, address (any combination of street name, zip code), description/nature of the incident, number of people involved in the incident. If the caller does not know the exact address of the patient, it is found using an external system.

This external system determines the incident address depending on the caller's phone number.

With this information a new incident is created in the ambulance dispatch system with all the details. The information added to this incident is called "incident information".

Locating nearest ambulance.

Depending on the location of the incident, this function will determine the nearest 3 available ambulances.

Allocating the ambulance to the incident.

Depending on the number of people involved in the incident, dispatcher will allocate the ambulance/s to the incident and add the ambulance details to the system. One ambulance is assigned to each person injured.

Dispatch of ambulance and resource.

Once the ambulance is allocated to the incident, dispatcher will use the system to send the notification, incident information and the details of the nearest hospital to ambulance personnel. This information is also called "allocation information". A geographical search of the place around which the incident has taken place will help the dispatcher find the nearest hospital.

The ambulance personnel can view this allocation information assigned to him on an LCD display inside the ambulance.

Finding the route to the incident

Once the allocation information is sent to the ambulance personnel, he can get the route information to the incident using an external GPS system. Ambulance personnel can view the route on his LCD screen inside the ambulance.

Once the ambulance personnel reach the incident location, route to the nearest hospital is also shown on his LCD screen using external GPS system.

Logging and Reporting of incidents.

Supervisors can use the ambulance dispatch system, to get reports and details on each incident.

Displaying timing information and error reporting.

The ambulance dispatch system will calculate and display the time required to dispatch the ambulance for each incident. The time has to be less than 3 minutes.

Also, if no ambulance is available for 11 minutes, the dispatch system will generate exception messages. When an exception is created, a person intervenes and takes care of it.

Tracking and monitoring of ambulance.

This functionality allows dispatcher to track the status of the ambulance. Once the job is completed, the system informs the dispatcher that the job has been executed.

The status of each ambulance is then updated as required.

Manage Users

This functionality allows supervisors to maintain the system and add/remove/update new users for the system. Each user (Dispatcher) will have username and password assigned to him.

External Systems:

The ambulance dispatch system will interact with some external systems which are described below:

Address Locator:

The address locator will try to locate the address of the incident, when the caller cannot give the exact details of the location.

GPS:

GPS system will be used to get the route details and directions to the incident location. These details will be used by ambulance personnel to reach the incident location.

The GPS system also gives information about the nearest hospital to the incident location.

Assumptions:

- The operator and the dispatcher are assumed to be the same person in this system.
- Creating an exception will solve the problem, when an ambulance cannot be found. It will be diverted to the third party who will take care of the situation.
- **Non functional requirements**

Usability

Ambulance Dispatch System shall provide mouse and keyboard navigation.

Ambulance Dispatch System shall be easy to navigate by using clear words, menus and drop-down lists.

Ambulance Dispatch System shall be accompanied with a user manual.

Reliability

Ambulance Dispatch System shall be available 24 hours a day for application users.

Performance

Ambulance Dispatch System shall not take longer than 15 seconds to respond to a page request for members; when using an internet connection that is 56k or higher

Supportability

The ambulance dispatch system application should be supportable in current equipment such as computers, monitors, printers etc.

Implementation

The software implementation will be performed on Friday evening to minimize impact. The implementation will be performed all on one day rather than in phases.

Interface

Ambulance Dispatch System shall be accessible through a web browser such as Internet Explorer 5 or higher and Netscape Navigator 4.7 or higher

Ambulance Dispatch System shall provide printer friendly outputs of reports so that users can have easy to read print outs of the reports.

Packaging

The application is internal department use only and will not be packaged and sold as a retail product.

Legal

This web site is for Department of Ambulance Dispatch System, and there are no subscriptions, membership fees. Department of Ambulance Dispatch System would appreciate the cooperation in reporting discrepancies and to not misuse or damage any of the functionality, information or contents of this internal use service web page. No external/external party may make an offer to sell or buy this website on behalf of a third party.

If any provision of this agreement is held to be invalid or unenforceable, such provision shall be struck and the remaining provisions shall be enforced. Headings are for reference purposes only.



School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	11
Title of Experiment	Test Cases
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain, Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	15-06-22

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To develop the test cases manual for the <project name>

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh Siyak	Member

<Utilize the templates below and incorporate the project's test cases - Manual Test case to be written for at least one module >

Result:

Thus, the test case manual has been created for the <project name>.

TEST PLAN

1. Introduction

This is the Master Test Plan for the Ambulance Dispatch System (CAD system). The document will only address to test following functionalities in the CAD application.

1. User Login
2. Retrieve Forgot Password

3. Display of the incident form
4. Admin

The primary focus of this plan is to ensure that the new Ambulance Dispatch System provides the desired level of information and details to meet patient's needs while allowing for improvements to dispatch ambulances within the time constraints. The testing phase will have 3 levels of testing: Unit, System/Integration and Acceptance. The details for each level are addressed in the approach section and will be further defined in the level specific plans.

The estimated time line for this project is very aggressive (eight (8) weeks), as such, and delays in the development process or in the installation and verification of the application could have significant effects on the test plan. The acceptance testing is expected to take 2 days from the date of application delivery from system test and is to be done in parallel with the current application process.

2. Relationship to other documents

2.1 Connection with Requirements Analysis Document (RAD)

We defined the accurate problem statement and agreed on the solution domain for the Computer Aided Dispatch (CAD) system in this phase. We produced use cases, realized them by sequence diagrams and Analysis level class diagrams.

2.2 Connection with System Design Document (SDD)

In this phase of the project we decomposed the system into subcomponents and defined how the subcomponents will interact with each other. We decided that we would use 3-tier client server architecture for the proposed system.

2.3 Connection with Object Design Document (ODD)

From the components that were in the design phase we came up with package diagram in this phase. Then we refined the class diagram from RAD phase. In this phase we added visibility, signature, pre-post conditions, and associations between the classes to the class diagram. The final class diagram was mapped to code.

3. System overview

Computer Aided Dispatch (CAD) system's goal is to provide fastest ambulance service to the victims of any emergency incidents. To achieve this goal the system is decomposed into User Login Interface, Location Tracking System (LTS) Interface, Incident form, and Admin. The CAD system assumes the input from Dispatcher Interface, processes it, sends the caller's phone number to LTS Interface, and receives the location details from LTS.

The Dispatcher Interface is used by a 911 ambulance dispatcher that stores all the information provided by the caller. This information includes address of the incident, number of people injured, number of ambulances required and type of emergency. After processing this information an appropriate incident report is created by this system and sent to the Dispatcher system as an input. The CAD system under consideration is built assuming validated report of an incident exists and is provided to CAD as an input.

The CAD system is designed to locate the available ambulances near the incident location and dispatch them as per the requirement with the help of LTS. We assume that LTS provides incident location and this will be used by CAD, to derive driving directions. LTS is a highly sophisticated navigation system that provides location details by accepting caller's phone number as an input.

All interfaces are closely interlinked and with validated inputs to the system interfaces an attempt is made to dispatch the ambulance within 3 minutes range.

4. Features to be tested/not to be tested

4.1 Features to be tested

The following are the major functionalities of the application that need to be tested in the testing process.

1. User Login screen
2. Admin
3. Incident information
4. Location tracker

4.2 Features not to be tested

In RAD document we had defined the scope of the system as follows:

Phase 1: When the dispatcher receives an emergency call from the caller, he/she communicates with the Ambulance system checks for the availability of ambulances and allocates an ambulance with the help of the CAD system within the 3 minutes time constraint.

Phase 2: Based on the preference of the patient the CAD system finds the nearest hospital

However due to time constraint we have only implemented the functionalities listed in the section 4.1 (Features to be tested). Therefore all other functional requirements and non-functional requirements should not be tested.

5. Pass/Fail criteria

The final test process will be completed once the Computer Aided Dispatch System (CAD) application receives a phone call from 911 services, efficiently records the details of an emergency incident including location, finds the next available ambulance and dispatches the ambulance within 3 minutes.

When the operations staff is satisfied that the data is correct and appropriate services are provided to incident victims then the system will be considered live.

At this point with the current development stage we will check if all the interfaces including location tracker, user login, and admin and incident info are functioning properly. Later as we progress with development and add more functionality to the application we will grow the scope of test plan as well.

6. Approach

Testing Levels:

As shown in the above class diagram we have implemented 3 main functionalities of the CAD system and they are as follows

1. User Login
2. Retrieve Forgot Password
3. Display of the Incident Form

The testing for the CAD system will consist of Unit, System/Integration (combined) and Acceptance test levels. We will have one full time person for system/integration testing.

UNIT testing will be done by the developers and will be approved by the entire team. Proof of unit testing (test case list, sample output, defect information) is provided to the team before unit testing will be accepted and passed on for the final submission.

System/Integration testing will be performed by entire team. No specific test tools are available for this project. All testing is manually performed. Programs will enter into system/integration test after all critical defects have been corrected. A program may have up to two major defects as long as they do not impede testing of the other programs.

Acceptance testing will be performed by the actual system users. Programs will enter into acceptance test after all critical and major defects have been corrected. The customer test representative will approve acceptance testing.

A limited number of distributors will participate in the initial acceptance test process. Once acceptance test is complete, distributors will be added as their ability to generate the required CAD data is verified.

7. Suspension and resumption

With following interfaces implementation we decided to suspend testing activity for 20% or more defects in Unit testing. In such situation we decide to redevelop the interfaces with agreed functionality. When we are back to 10% or lesser defects in Unit testing we resume testing process.

1. Login
2. Admin (Retrieving password functionality)
3. Incident Info
4. Location Tracker

8. Testing materials (hardware/software requirements)

The testing effort will require two single processor desktop PC. To properly test our non-functional performance requirement, it must have no more than 1 GHz CPU and 256 MB RAM. One of these machines will be running Windows XP and the other will be using Linux. Both machines will be using the Java Runtime Environment version 1.5. We won't be using any testing tools as we will be manually testing all the interfaces.

We will document all the test results using following template while delivering the application.

Tested By:	
Test Type	
Test Case Number	
Test Case Name	
Test Case Description	

Item(s) to be tested	
1	
2	
Specifications	
Input	Expected Output/Result
Procedural Steps	
1	
2	

3	
4	
5	
6	
7	

9. Test cases

Test Case # - 001

Test Case Name - User Login

Test Items –

Functionality of the User Login screen

Input Specifications –

Valid UserName - ace@ace6354.com

Valid Password – ace

Invalid UserName – sam

Invalid Password - bob

Output Specifications –

Input	Expected Output
Valid UserName + Valid Password	Display Dispatch Screen

Invalid UserName + Valid Password	Display Error Message
Valid UserName + Invalid Password	Display Error Message
Invalid UserName + Invalid Password	Display Error Message

Environmental Needs –

Working CAD System.

Special Procedural Requirements –

None

Intercase Dependencies –

None

Test Case # - 002

Test Case Name – Enter Incident Info

Test Items –

Functionality of the Dispatcher screen

Input Specifications –

Name - Bob

Valid Phone # - 9729007833

Invalid Phone # - 9725885698

Patient condition – In car accident.

Output Specifications –

Input	Expected Output
Valid Phone #	Address field is populated
Invalid Phone #	Throws exception

Environmental Needs –

Working CAD System.

Special Procedural Requirements –

None

Intercase Dependencies –

None



School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	12
Title of Experiment	Manual Test Case Reporting
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain , Umesh Siyak
Register Number	RA2011031010081
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To prepare the manual test case report for the <project name>

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep/Member
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh Siyak	Member

Current Status Of Testing: All manual and automated tests have been completed and their corresponding reports generated.

Obstacles: Problems were faced in non-functional tests, in Performance, Overall Security and Scalability.

A general solution for these problems is to spend more capital resources on more skilled technical workers and more server space for faster and more secure user experience.

Category	Progress Against Plan	Status
Functional Testing	Green	Completed
Non-Functional Testing	Green	Completed

Functional	Test Case Coverage (%)	Status
Verify User Login	100%	Completed
Login Module	100%	Completed
Search Engine	100%	Completed
Payment Security	100%	Completed

Non-Functional	Test Case Coverage (%)	Status
Usability	100%	Completed

Overall Security	96%	Completed
Performance	80%	Completed
Scalability	95%	Completed

Result:

Thus, the test case report has been created for the Ambulance booking app.



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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	13
Title of Experiment	Provide the details of Architecture Design/Framework/Implementation
Name of the candidate	Anshul Toshniwal
Team Members	Sanchal Jain, Umesh siyak
Register Numbers	RA2011031010081
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim

To provide the details of architectural design/framework/implementation

Team Members:

S No	Register No	Name	Role
1	RA2011031010081	Anshul Toshniwal	Rep/Member
2	RA2011031010072	Sanchal Jain	Member
3	RA2011031010095	Umesh siyak	Member

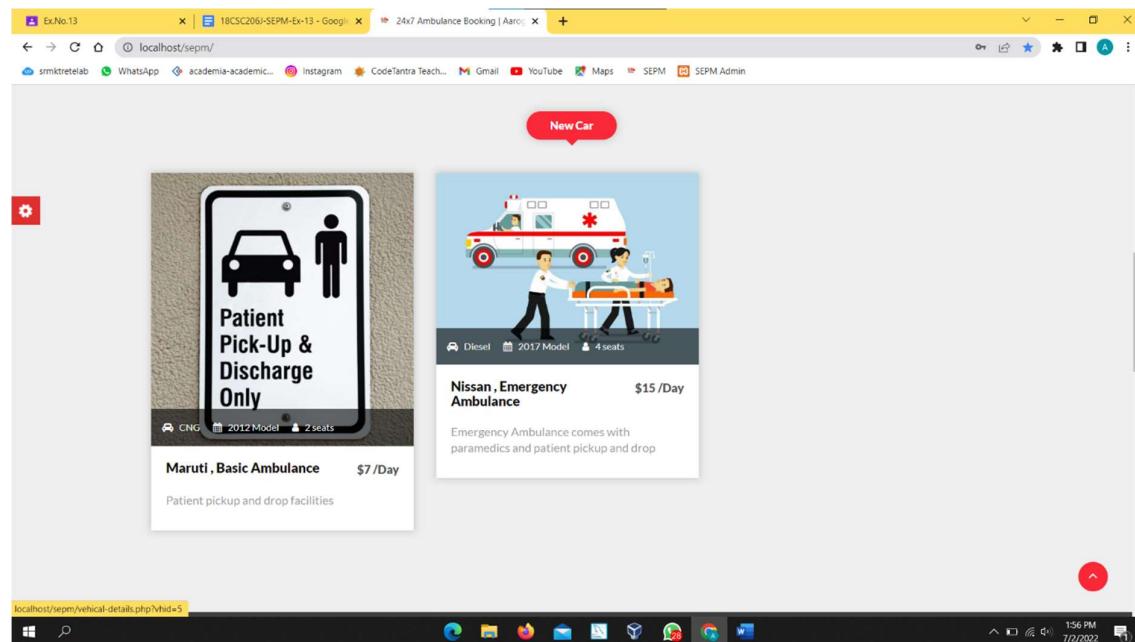
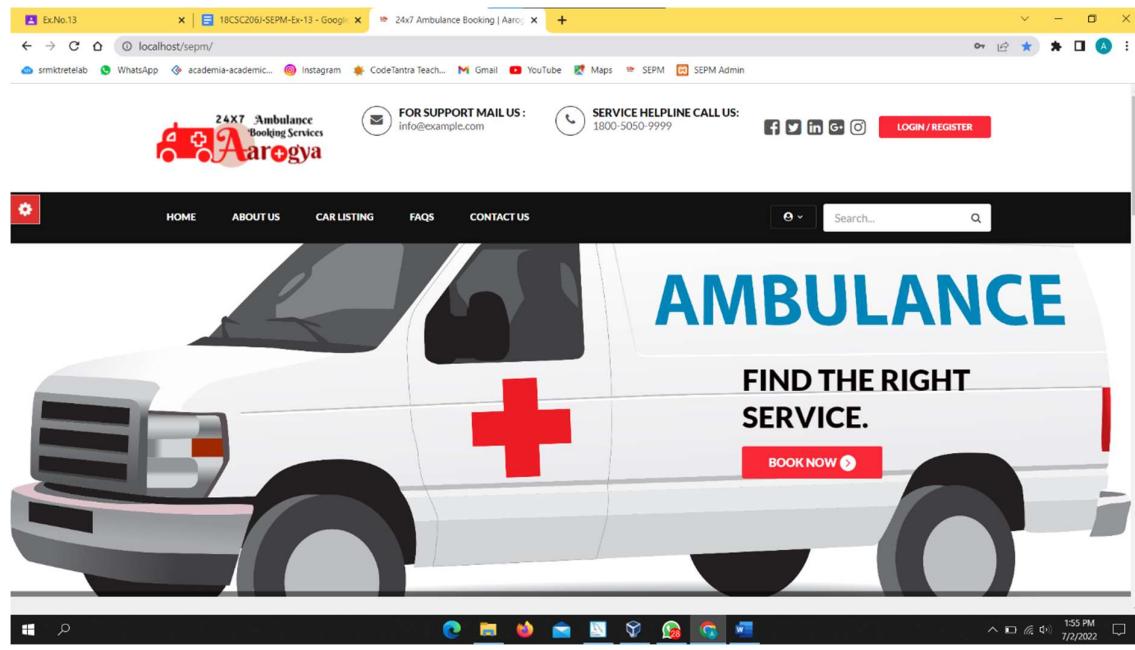
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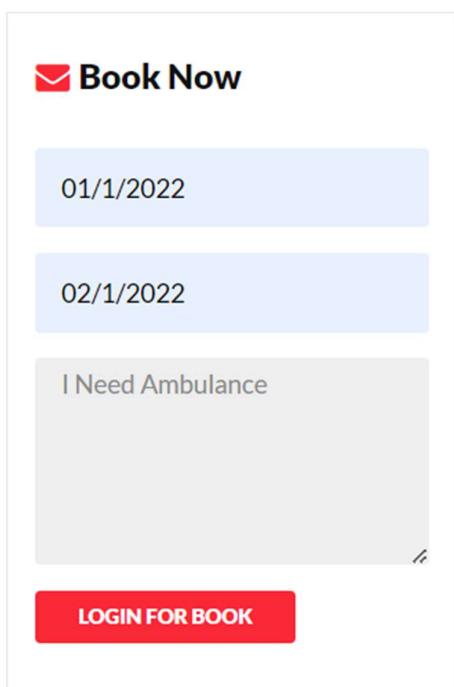
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2.  <html xmlns="http://www.w3.org/1999/xhtml">
3.  <head>
4.  <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5.  <title>Bitnami: Open Source. Simplified</title>
6.  <link href="bitnami.css" media="all" rel="stylesheet" type="text/css" />
7.  <link href="/dashboard/stylesheets/all.css" rel="stylesheet" type="text/css" />
8. </head>
9. <body>
10. <div class="contain-to-grid">
11.   <nav class="top-bar" data-topbar>
12.     <ul class="title-area">
13.       <li class="name">
14.         <h1><a href="/dashboard/index.html">Apache Friends</a></h1>
15.       </li>
16.       <li class="toggle-topbar menu-icon">
17.         <a href="#">
18.           <span>Menu</span>
19.         </a>
20.       </li>
21.     </ul>
22.
23.     <section class="top-bar-section">
24.       <!-- Right Nav Section -->
25.       <ul class="right">
26.         <li class="active"><a href="/applications.html">Applications</a></li>
27.         <li class=""><a href="/dashboard/faq.html">FAQs</a></li>
28.         <li class=""><a href="/dashboard/howto.html">HOW-TO Guides</a></li>
29.         <li class=""><a target="_blank" href="/dashboard/phpinfo.php">PHPInfo</a></li>
30.         <li class=""><a href="/phpmyadmin/">phpMyAdmin</a></li>
31.       </ul>
32.     </section>
33.   </nav>
34. </div>
35. <div id="wrapper">
36.   <div class="hero">
37.     <div class="row">
38.       <div class="large-12 columns">
39.         <p>Apache Friends and Bitnami are cooperating to make dozens of open source
  applications available on XAMPP, for free. Bitnami-packaged applications include
  Wordpress, Drupal, Joomla! and dozens of others and can be deployed with one-click
  installers. Visit the <a href="https://bitnami.com/xampp?utm_source=bitnami&utm_medium=installer&utm_campaign=XAM"
```

```

PP%2BModule" target="_blank">Bitnami XAMPP page</a> for details on the currently
available apps.</p><br/>
40.          <p>Check out our <a
41.            href="https://www.apachefriends.org/bitnami_for_xampp.html" target="_blank" >Bitnami for
42.              XAMPP Start Guide</a> for more information about the applications installed.</p>
43.        </div>
44.      </div id="lowerContainer" class="row">
45.        <div id="content" class="large-12 columns">
46.          <!-- @@BITNAMI_MODULE_PLACEHOLDER@@ -->
47.        </div>
48.      </div>
49.    </div>
50.    <footer>
51.      <div class="row">
52.        <div class="large-12 columns">
53.          <div class="row">
54.            <div class="large-8 columns">
55.              <ul class="social">
56.                <li class="twitter"><a href="https://twitter.com/apachefriends">Follow us
on Twitter</a></li>
57.                <li class="facebook"><a href="https://www.facebook.com/we.are.xampp">Like
us on Facebook</a></li>
58.                <li class="google"><a href="https://plus.google.com/+xampp/posts">Add us
to your G+ Circles</a></li>
59.              </ul>
60.
61.              <ul class="inline-list">
62.                <li><a href="https://www.apachefriends.org/blog.html">Blog</a></li>
63.                <li><a href="https://www.apachefriends.org/privacy_policy.html">Privacy
Policy</a></li>
64.                <li>
65.                  <a target="_blank" href="http://www.fastly.com/"> CDN
provided by
66.                  
67.                </a>
68.              </li>
69.            </ul>
70.          </div>
71.          <div class="large-4 columns">
72.            <p class="text-right">Copyright (c) 2015, Apache Friends</p>
73.          </div>
74.        </div>
75.      </div>
76.    </div>
77.  </footer>
78. </body>
79. </html>
80.

```





The screenshot shows the Aarogya Service Portal Admin Panel dashboard. The title bar includes the URL "localhost/sepm/admin/dashboard.php". The dashboard features a sidebar on the left with various menu items: Main, Dashboard, Brands, Vehicles, Manage Booking, Manage Testimonials, Manage Contact Query, Registered Users, Registered Drivers, Manage Pages, Update Contact Info, and Manage Subscribers. The main content area is titled "Dashboard" and displays six data cards in a 2x3 grid:

REG USERS	LISTED VEHICLES	TOTAL BOOKINGS
7	2	8
FULL DETAIL →	FULL DETAIL →	FULL DETAIL →

LISTED BRANDS	SUBSCRIBERS	QUERIES
2	1	1
FULL DETAIL →	FULL DETAIL →	FULL DETAIL →

TESTIMONIALS
3
FULL DETAIL →

The taskbar at the bottom shows various application icons, and the system tray indicates the date and time as "158 PM 7/2/2022".

MY BOOKINGS



Maruti , Basic Ambulance

Confirmed

Message: i need ambu

From Date: 01/1/2022

To Date: 02/1/2022

Result:

Thus, the details of architectural design/framework/implementation along with the screenshots were provided.

CONCLUSION

As of now, there are only a few projects working to aid ambulance and emergency facilities to needy. With India, "Dial4242" has spread its roots in ERA. Ambuitec is an advancement to such existing projects with a userfriendlyand blood inventory facility. Our summing-up is, we have developed our project to handle emergency health situations and to evacuate the patient to a nearby and communicated hospital. In this article, an approach is extended toward rescuing a sufferers" life in a more accelerated approach as feasible. It is extremely essential for sufferers in the matter of crises since it conserves time. With the help of this Project,the mergen cyvehicle can contact the user or victim as the position is followed or supplied within the application furthermore can produce the essential tools that are expected for the patient"s well-being .

REFERENCES

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- <https://www.tutorialspoint.com/index.htm>
- <https://medium.com/>