# ONLINE NEWS WEBSITE

A COURSE PROJECT REPORT

By

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Under the guidance of

**Dr. B.Hariharan**

*In partial fulfilment for the Course*

of

Programming In Java Script-18CSE373T-E

in Department of Computational Intelligence


**FACULTY OF ENGINEERING AND TECHNOLOGY**

**SRM INSTITUTE OF SCIENCE AND**

**TECHNOLOGY**

**Kattankulathur, Chenpalpattu District**

NOVEMBER 2022

# SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

**(Under Section 3 of UGC Act, 1956)**

## BONAFIDE CERTIFICATE

Certified that this mini project report "**Online News Website** " is the bonafide work of **Aniket Bada Panda [RA2011033010053], Garv Jaiswal [RA2011033010035], Bedanta Gautom [RA2011033010048]** who carried out the project work under my supervision.

**SIGNATURE**

<Faculty Name>
**<Designation>**
**<Department>**
SRM Institute of Science and Technology

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# Abstract

Today the world totally relays upon the electronic media to its every day adventure. People have no time to be updated through newspaper or watching or listening the news on television or radios. People today need to be updated on daily basis in this competitive world. Most of the people get the information about the world around through the internet which is fast, accessible, and reliable. The WWW (World Wide Web) is huge, widely distributed, global information service centre for Information services: news, advertisements, consumer information, financial management, education, government, e-commerce etc, hyper-link information, access and usage information. "24 Hours News Portal" is a service introduced to meet the above requirement and to make the people updated about the news, views, reviews, breaking news and latest headlines in different fields also the new inventions around the world.

## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 1 |
| **Title of Experiment** | To identify the Software Project, Create Business Case, Arrive at a Problem Statement. |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**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.

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

## TITLE

Online News Website - Live News Website using News API.

### THE PROJECT

Live news website allows customers to read up to date news related to many fields like entertainment, national, international, business, sports etc. without any payment or login using news API. The objective of this project is to develop a web application for Online News website that can aware the people and provide the daily news as well as breaking news. It makes use of various technologies to get required crime-oriented information more quickly, easily, colourfully and attractively. Anytime, anywhere, anyone can know about the news or information by internet at low cost. Dynamically provides facility.

### THE HISTORY

The traditional media rooms all around the world are fast adapting to the new age

technologies. This marks the beginning of news portals by media houses across the globe. This new media channels give them the opportunity to reach the viewers in a shorter span of time than their print media counterparts.

**LIMITATIONS**

 Language changing system has not been developed.

 User reply system has not been developed.

**APPROACH**

The design of the website will be created by using HTML, CSS and JavaScript.

We will use News API to get the access of the news data for displaying it in our website.

**BENEFITS**

 News on the Internet can be updated round the clock so that readers can have the most up-to-date news any time of the day or night.

 Once a news item is put on the internet, it becomes instantly available for use round the globe without additional variable costs.

 You don’t have to wait for newspaper in morning.

 Any time any news related to different fields will be available.

 Money and time will also save.

 The type of news and the way it is presented can be customized to the needs and preference of individual readers.

## Result:

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


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**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 2 |
| **Title of Experiment** | To identify the Process Methodology and Stakeholder Documentation |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**Mark Split Up**

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|---|---|---|---|
| 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:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

**Project Title: News Website**

**Stakeholder Documentation and their impacts:**

| Project Name – Online News Website(Live news website) | | | | |
|---|---|---|---|---|
| Prepared by – Aniket Bada Panda, Bedanta Gautom, Garv Jaiswal | | | | |
| **Project Stakeholder** | **Specific Information Needs** | **Project Interests** | **Impact on Project** | **Role** |
| | **Types & Frequency of Communication** | **Specific Area of Interests and Participation** | **Positive, Negative, Influencer, Supporter** | **Decision Maker, Collaborator, Consultant, Information, Recipient** |
| DIRECTOR | Frequent Communication<br><br>Provides guidance and instructions | Decision Making, Salary | Supporter, Positive | Directorial Management |
| GENERAL MANAGER | Frequent Communication<br><br>Information on Business Policies | Directly Engaged, Profit Growth | Positive Supporter | Decision Maker |

| | | | | |
|---|---|---|---|---|
| DEVELOPER | Regular Communication<br><br>Information on New features | Development of New Features | Supporter | Information, Collaborator |

| | | | | |
|---|---|---|---|---|
| BRAND MANAGER | Frequent Communication<br><br>Information on Services and Policies | Influence the Overall Revenue | Influencer, Supporter | Collaborator, Consultant |
| CUSTOMER | NIL | Provides Feedback | Supporter | Recipient, Rating |

**Process model:**

Agile Model

Agile uses an adaptive approach where there is no detailed planning and there is clarity on future tasks only in respect of what features need to be developed. There is feature driven development and the team adapts to the changing product requirements dynamically. The product is tested very
frequently, through the release iterations, minimizing the risk of any major failures in future.

**Comparison of methodologies:**

Agile is based on the adaptive software development methods, whereas the traditional SDLC models like the waterfall model is based on a predictive approach. Predictive teams in the traditional
SDLC models usually work with detailed planning and have a complete forecast of the exact tasks
and features to be delivered in the next few months or during the product life cycle. Predictive methods entirely depend on the requirement analysis and planning done in the beginning of cycle.
Any changes to be incorporated go through a strict change control management and prioritization.

**Selection of Methodology:**

**Comparison of Methodologies:**

| Waterfall | Spiral | Agile | V-Model |
|---|---|---|---|
| There are many stages to the software development process | The spiral model is considered meta-model as it includes all other life cycle methods | Project development life cycle is divided into sprints. | The v-model is an SDLC model, where execution happens in a sequential manner in a 'V' shape |
| This technique is a way of designing a progressive model | This is divided into 4 phases | It takes a step by step method | This uses verification phases |
| Steps Requirements, Design, Implementation, Verification and Maintenance | Steps Planning, Design, Construct and evaluation | Steps Requirements, Plan, Design, Develop, Release and Tract & Monitor | Steps Acceptance Test Design, System Test Design, Integration Tests Design and Unit Test Design |
| The waterfall model's main idea is to create a system with linear and sequential approach | The spiral models fundamental concept is risk management | The Agile model's core idea is to create agility by eliminating tasks that waste time and effort | The V-Model's main idea is that development and testing activities correspond to each other |

**Result:** Thus the Project Methodology was identified and the stakeholders were described.

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**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 3 |
| **Title of Experiment** | System, Functional and Non-Functional Requirements of the Project. |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

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**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 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
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| 3 | RA2011033010048 | Bedanta Gautom | Member |

**Project Title: News Website**

**Identify the Requirements:**

**Functional requirements –**

Reading news – The website should have simple interface with possibility to observe many news with small description in one page. Pushing link/button “read more” to see full information.

Searching – The website should have text field and button “find” to find anything on the web page.

Sharing – The website should have tools to share this news in social networks.

**Non functional Requirements -**

Project must be simple to use and light weight. Also, that is important to have safe security system.

**System Requirements –**

Microsoft Windows Vista/7/8

・Mac OS X 10.5 or higher

・iOS 6 or higher

・Android 2.3 or higher

・Internet Explorer 9 or higher (except for compatibility view setting)

・Safari (latest version)

・Google Chrome (latest version)

**Result:** Thus the requirements were identified and accordingly described.


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**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 4 |
| **Title of Experiment** | Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

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**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:**

| S. No | Register No | Name | Role |
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| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
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**Project Title: News Website**

**Cost Estimation**

**Modules:**

- Login : 100 KLOC
- Home : 70 KLOC
- Sports News : 50 KLOC
- Political News : 70 KLOC
- Entertainment News : 60 KLOC
- Search : 40 KLOC
- Feedback : 50 KLOC
- Contact : 30KLOC

Total : 470 KLOC

**Organic** – A software project is said to be an organic type if the team size required is adequately small, the problem is well understood and has been solved in the past and also the team members have a nominal experience

regarding the problem.

**Estimation of Effort: Calculations –**

Basic Model –

E = 2.4*(470)^1.05 = 2.4*639.30 = 1534.32 MM

Time = 2.5*(1534.32)^0.38 = 2.5*16.24 = 40.6 ~ 41 Months

Person required = E/Time = 1534.32/40 = 38.358 ~ 38 persons

**Result:** Thus, job efforts and productivity were successfully calculated, using the COCOMO model.

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**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 5 |
| **Title of Experiment** | Prepare Work breakdown structure, Timeline chart, Risk identification table. |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

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**Aim**

To prepare Work breakdown structure, Timeline chart, Risk identification table.

**Team Members:**

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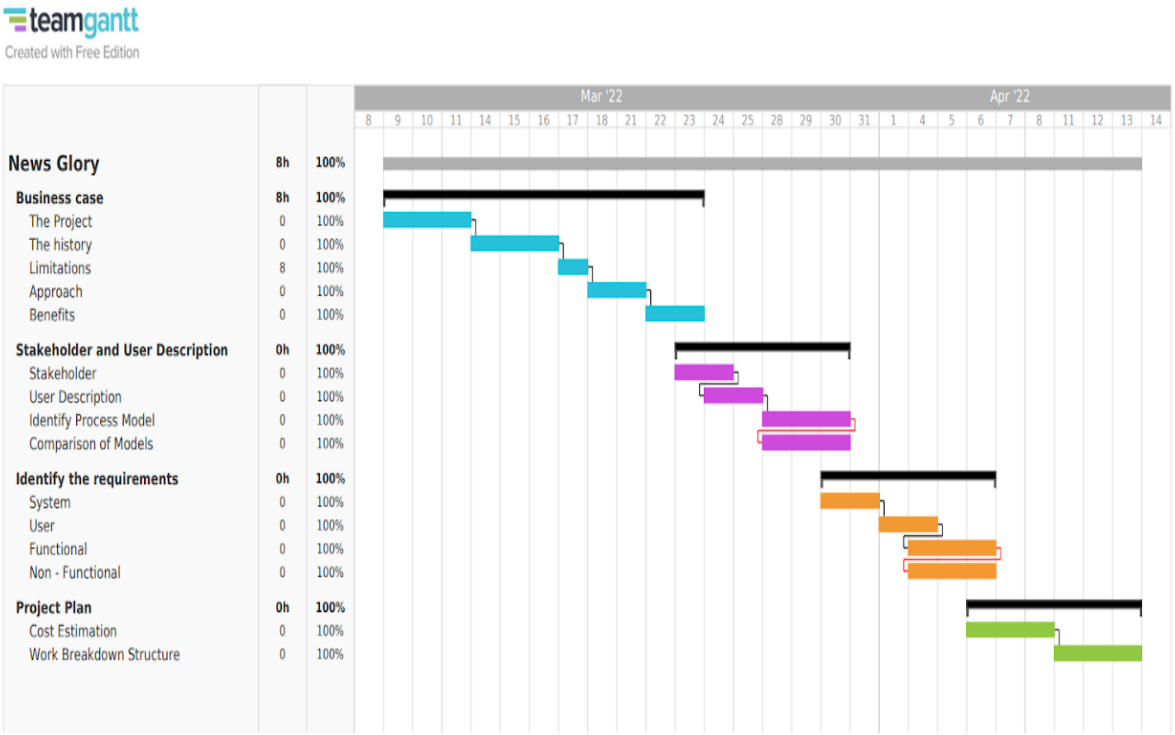
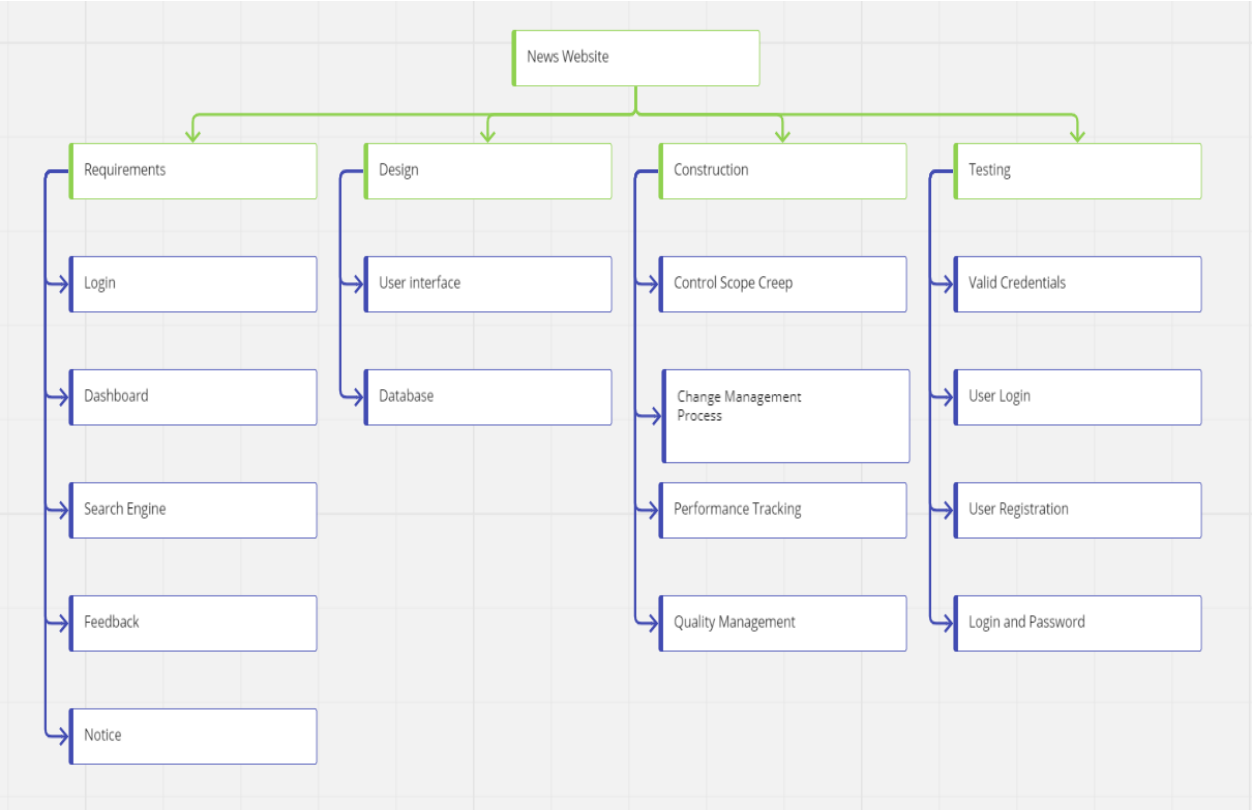
**Project Title: News Website**

**Timeline Chart -**



**Work Breakdown Structure -**




**RISK MANAGEMENT**

Risk from outer world:

- Presence of Similar kind of service providers.

Server End:

- Disk failure of the database system.
- Slow data iteration.
- Improper connection to the internet.
- Hacker’s tent to get the user data.

Solution:

- Using of better disk drive and time to time server maintenance.
- Using of better algorithm for the iteration data.

 Using various trusted Gateway provider.

 Using of captcha to protect it from bot attacks.

**RISK ANALYSIS**

Strengths:

 Online News Website with text-to-speech feature.

 Optimized UI.

 Real time news updates.

Weakness:

 Multiple website with same technology.

Threats:

- Phishing.
- Ransomware.
- SQL injection.
- Cross-site scripting.
- Code injection.
- CEO fraud and impersonation.
- Viruses and worms.
- Spyware.

**Result:** Thus, the Work-Breakdown structure, Timeline diagram and the Risk Table were designed successfully.

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## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 6 |
| **Title of Experiment** | Design a System Architecture, Use Case and Class Diagram. |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**Mark Split Up**

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

**Staff Signature with date**

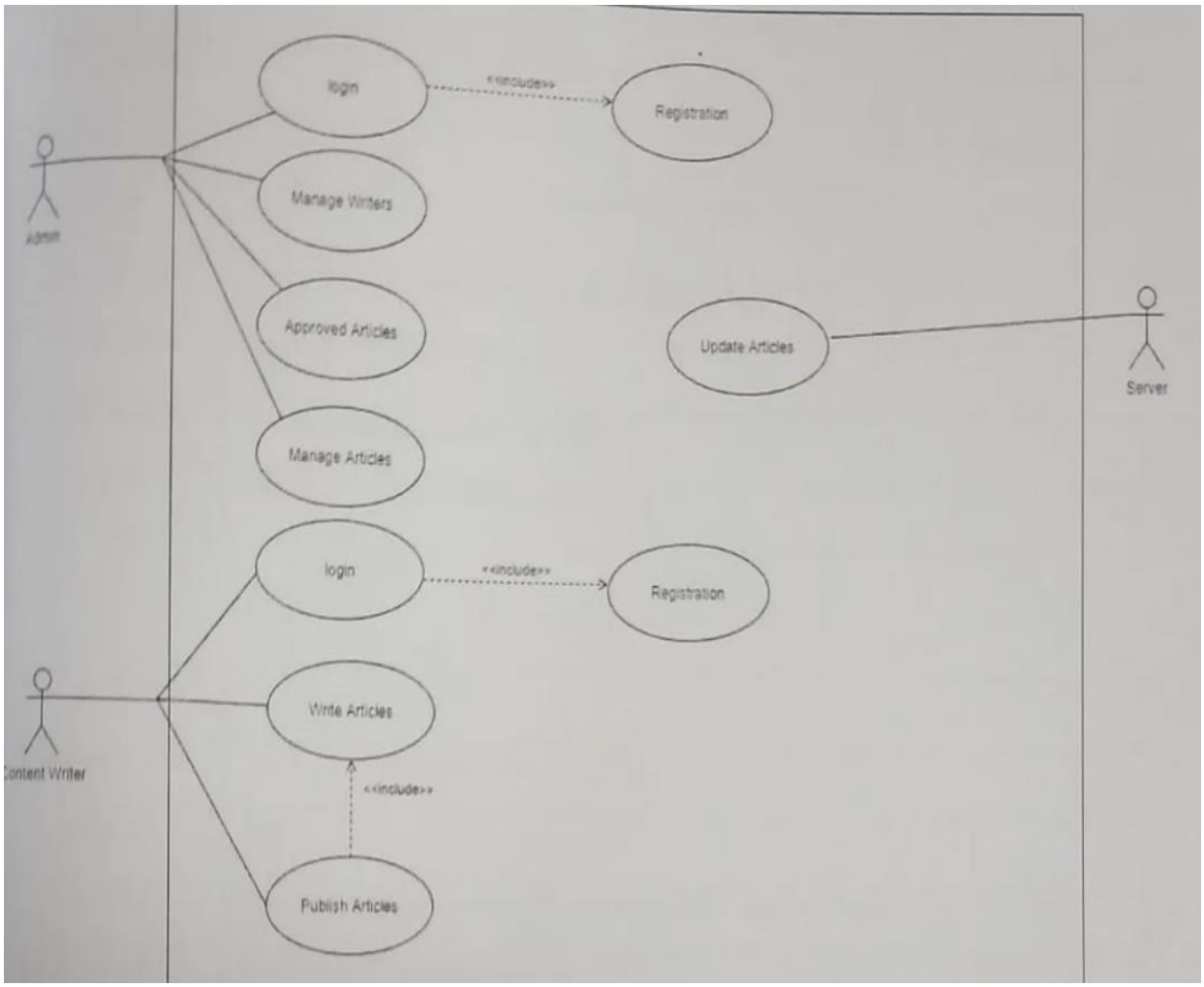
**Aim**

To Design a System Architecture, Use case and Class Diagram.

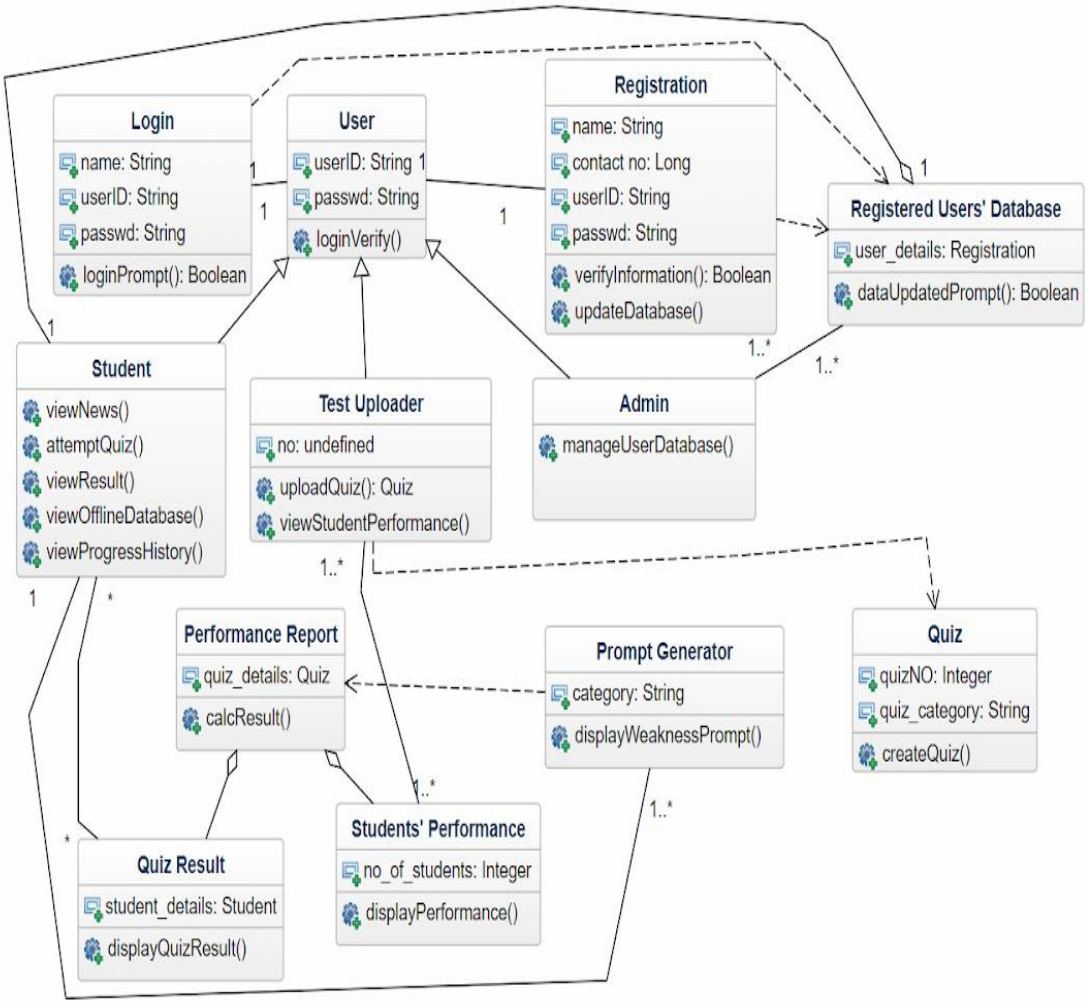
**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

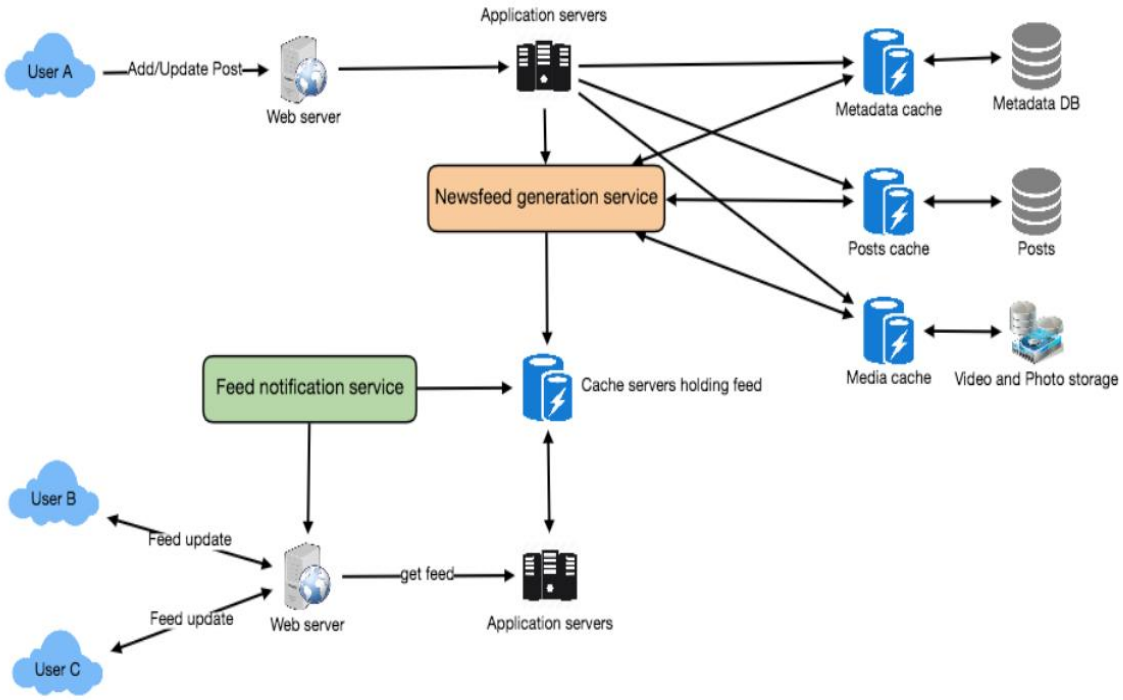
**Use-case diagram:**



**Class diagram:**



**Architecture diagram:**




**Result:** The use-case, class and architecture diagrams for the system were designed successfully.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## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 7 |
| **Title of Experiment** | Design a Entity relationship diagram |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**Mark Split Up**

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|---|---|---|---|
| 1 | Exercise | 5 | |
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| | **Total** | **10** | |

**Staff Signature with date**

**Aim**

To create the Entity Relationship Diagram

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

**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

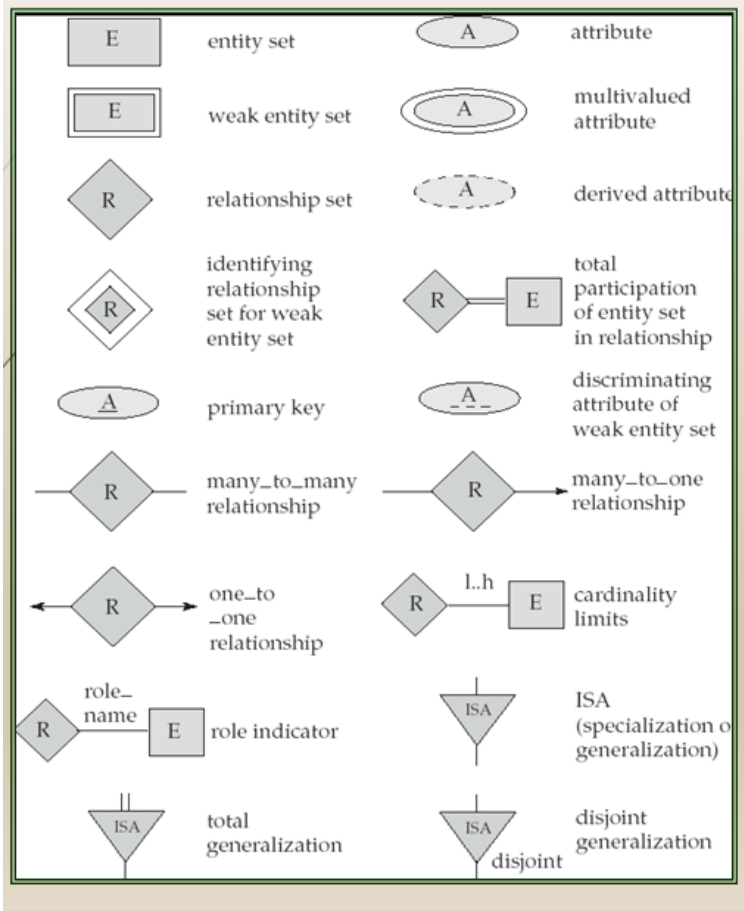
- ERD Diagram allows you to communicate with the logical structure of the database to users

**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 News Portal –**


## 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.

**Result:** The ER Diagram for the system was drawn successfully.


## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 8 |
| **Title of Experiment** | Develop a Data Flow Diagram (Process-Up to Level 1) |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

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**Staff Signature with date**

**Aim**

To develop the data flow diagram up to level 1 for Diaspora Evacuation System.

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
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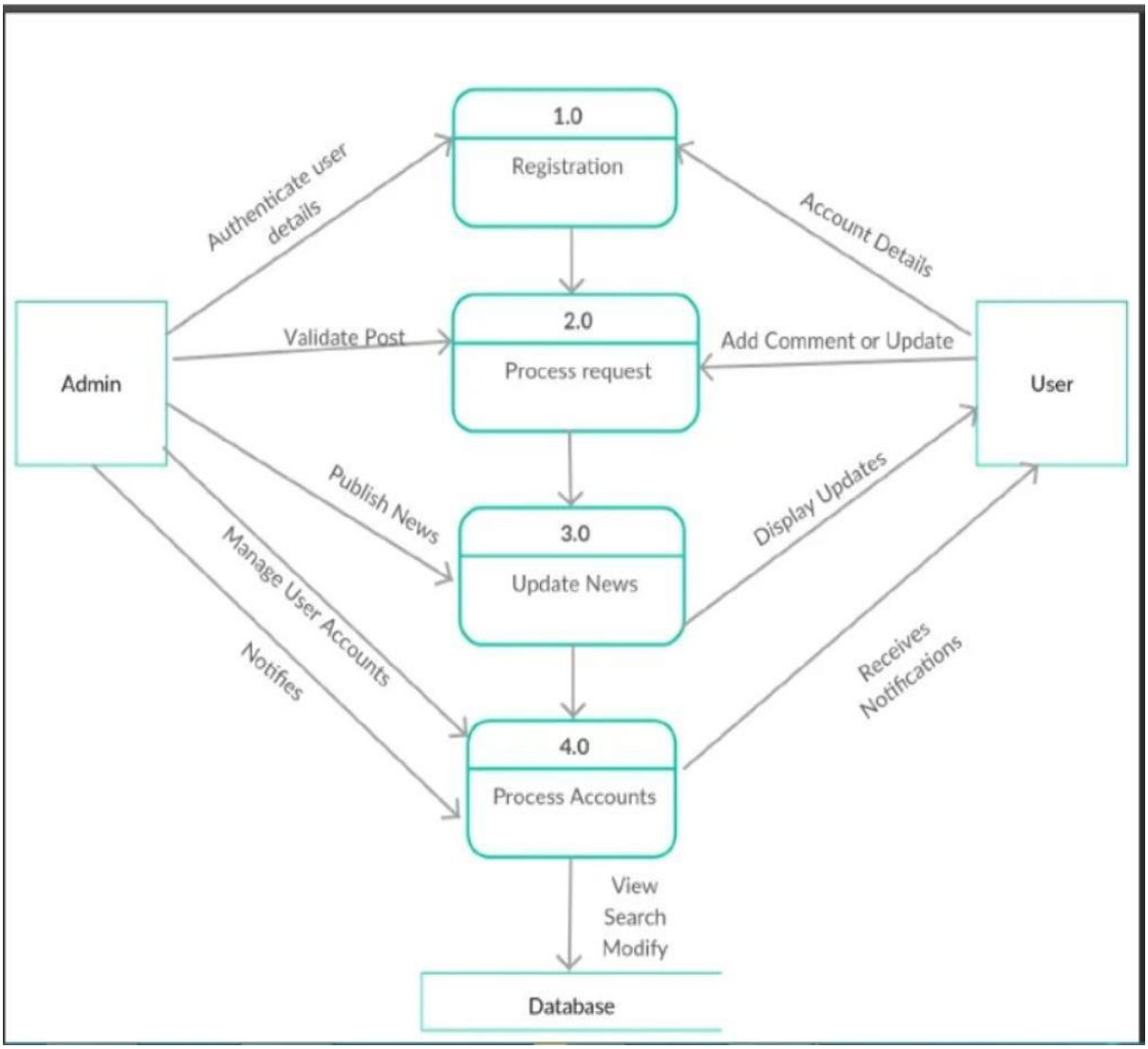
| 3 | RA2011033010048 | Bedanta Gautom | Member |

## 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.

**Data Flow Diagram –**




**Result**: Thus, the data flow diagrams have been created

## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 9 |
| **Title of Experiment** | Design a Sequence and Collaboration Diagram |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**Mark Split Up**

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

**Staff Signature with date**

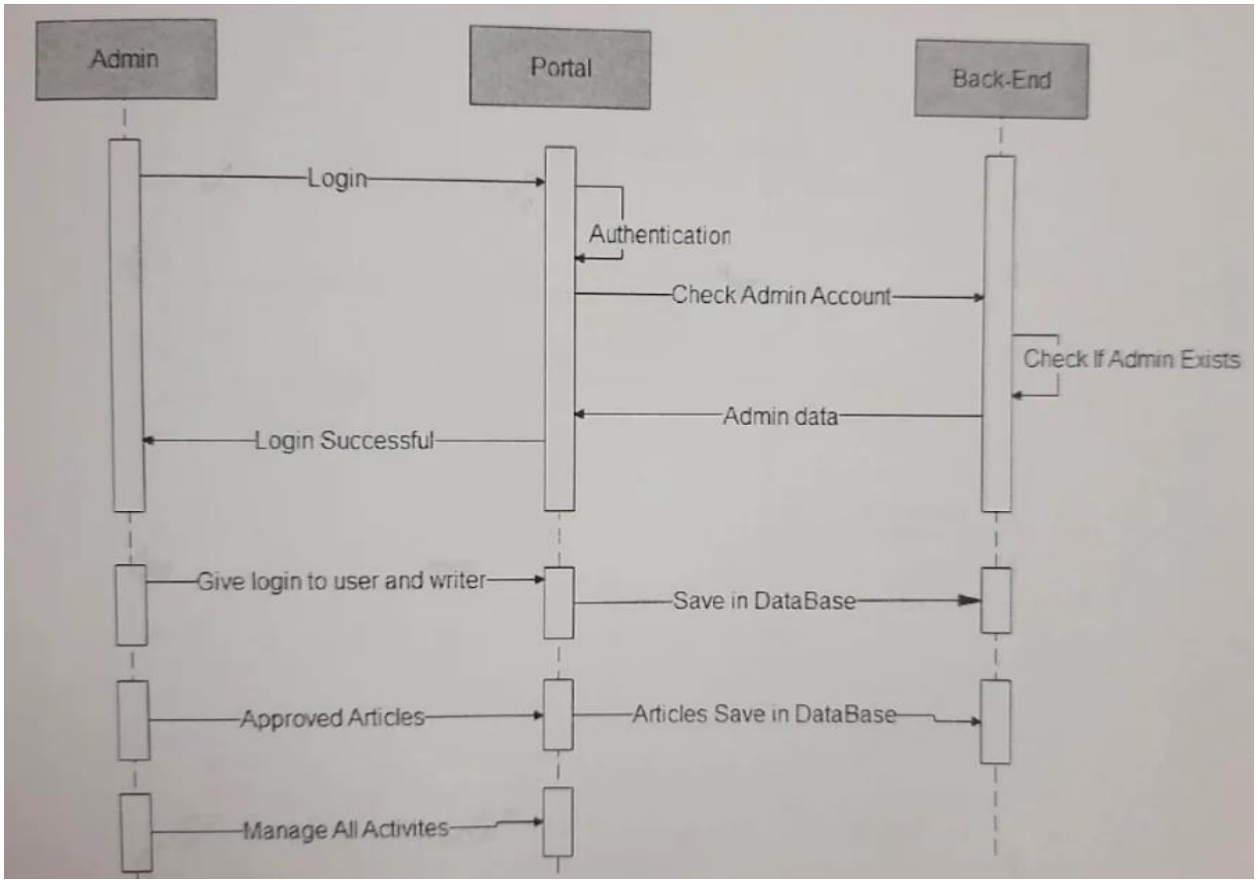
**Aim**

To develop the Sequence and Collaboration Diagram for News Website.

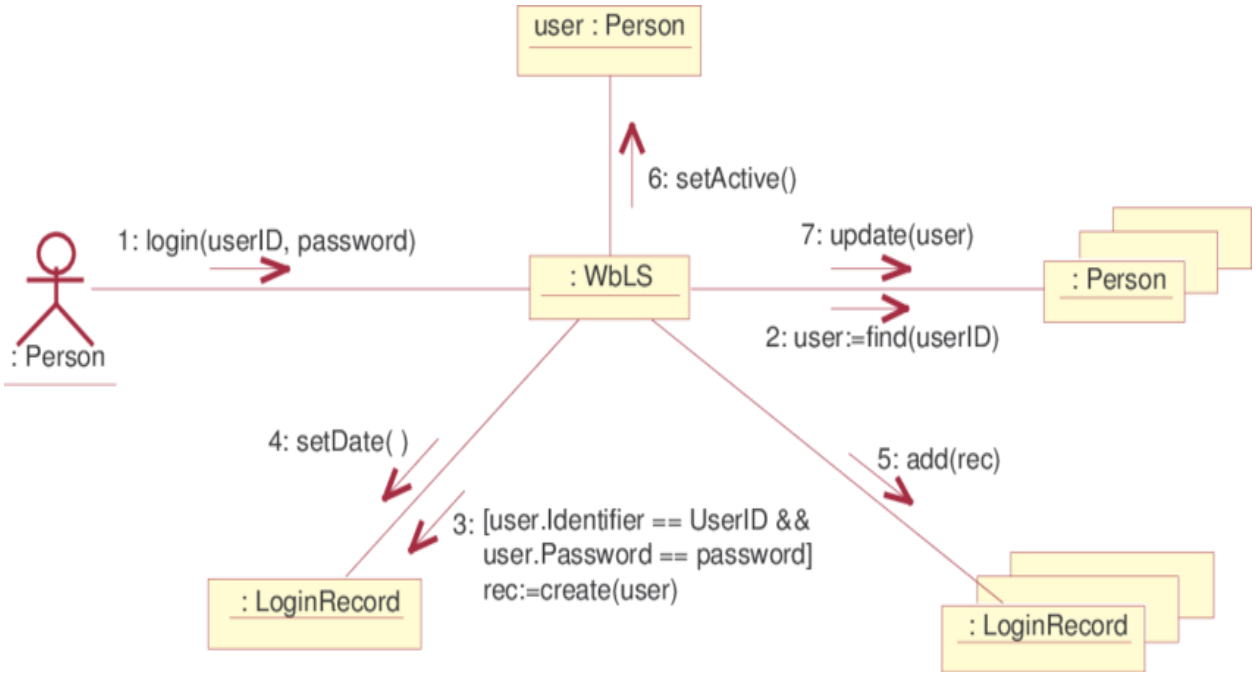
**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

**Sequence Diagram:**



Collaboration Diagram:




**Result:** Thus, the sequence and collaboration diagrams were created.


## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 10 |
| **Title of Experiment** | Develop a Testing Framework/User Interface |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**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 **(login system)** framework for News Website.

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

**UI Framework:**

Objective –

We have to design and build an web application of news website. As the time is progressing we are in need of being aware about the world by news. It is very important for our daily life.

Approach –

I. Unit testing – Here we are testing each module and if error comes it will

be solved at unit level.

II. Integration testing – Here we are combining different modules and

testing their compatibility.

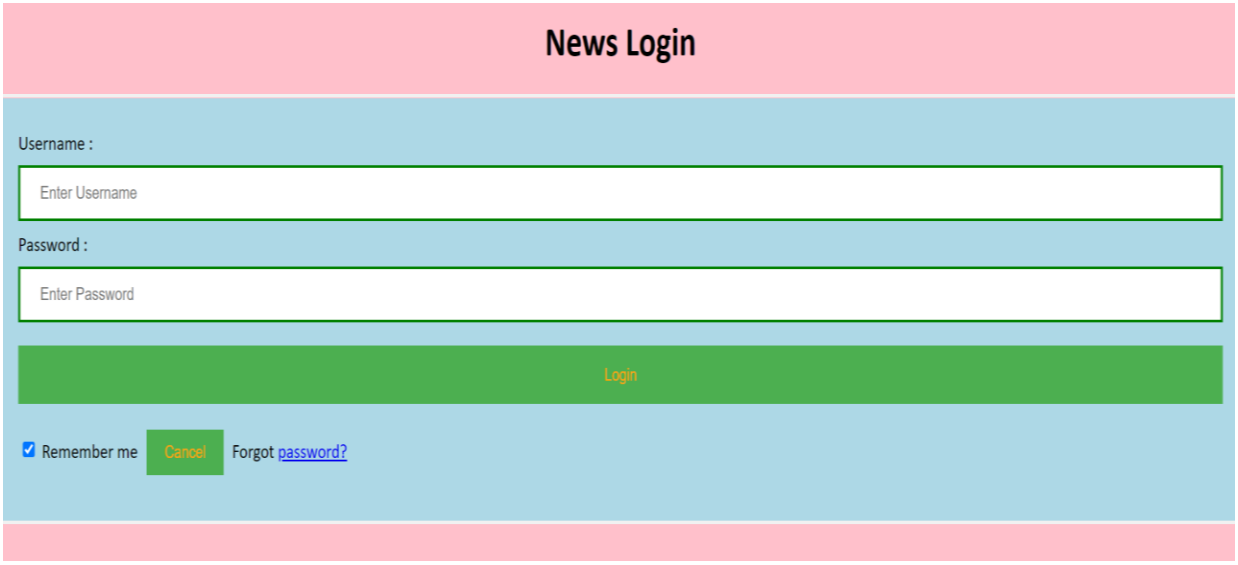
III. System testing – Here we are going to test its compatibility with different

systems.

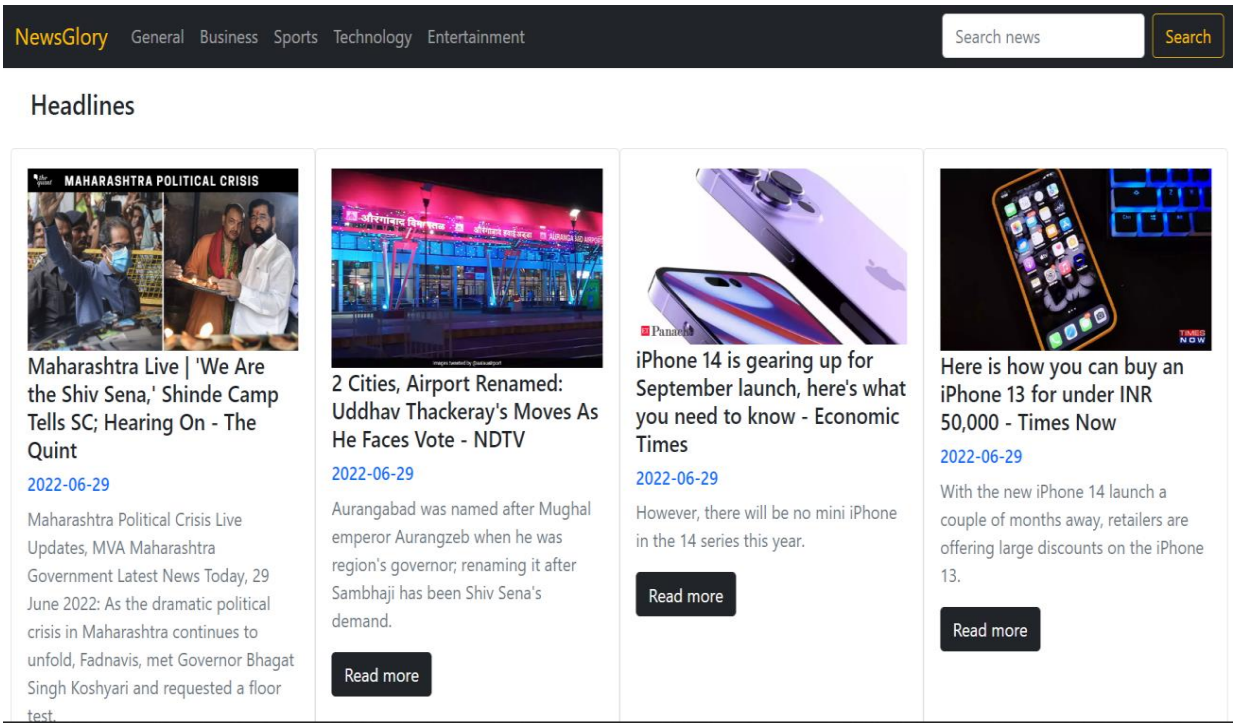
IV. Acceptance testing – Here we are going to test it with whether it will be

accepted by the user or whether it fulfills the users requirement or not.

## 1)Login Interface:




## 2) UI after login:




**Result:** Thus, the user interface framework has been created for the DES(Diaspora Evacuation System).


## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 11 |
| **Title of Experiment** | Test Cases |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**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 News Website.

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

**Test Cases:**

| Test ID (#) | Test Scenario | Test Case | Execution Steps | Expected Outcome | Actual Outcome | Status | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | Verify User Registration from India | Accept Valid India Mobile Number on the Page#1 | 1. User clicks on User Registration link<br>2. Enter the mobile Number on the text box<br>3. Click Register button | User should be taken to the next page for entering more user details | | Pass | success |
| | Verify User Registration from India | Don't Accept Non IndianMobile Number on the Page#1 | | User should type the mobile number again with correct country code. | | Failure | |
| 2 | Log in with the valid credentials i.e. correct username | Correct username and password#2 | 1. User clicks on the login page link.<br>2. User enters the | User should be taken to the news feed page. | | Pass | success |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | and password | | email id/phone no. and password in the desired field.<br>3. Click login button. | | | | |
| | | Incorrect username and password#2 | | User should type the correct username and password for login. | | Failure | |
| 3 | Check user should register by filling all the required fields in Registration page. | Filled all the required fields.#3 | 1. Enter valid values in the required fields.<br>2. Click the create account button. | 1. Users should be registered successfully.<br>2. A successful registration message should show.<br>3. Mail should send to the user. | | Pass | success |
| | | Did not fill all the required fields.#3 | | User should fill all the required fields. | | Failure | |

**Result**: Thus, the test case manual has been created for the News Website.

## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 12 |
| **Title of Experiment** | Manual Test Case Reporting |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**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 News Website.

**Team Members:**

| S. No | Register No | Name | Role |
|---|---|---|---|
| 1 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

The percentage of success rate and failure rate has been calculated using the following equations:
Success:

$$\text{Rate} = \frac{\text{Total number of success}}{\text{Total number of test}} \times 100\%$$

$$\text{Rate} = \frac{\text{Total number of failure}}{\text{Total number of test}} \times 100\%$$

The performance is related to success rate and failure rate. If the success is high then the performance of the system is good. Success rate and Failure rate are contradiction of each other. So when success rate is high then failure rate is low. In the two terms the performance of the system is depended.

**Result:** Thus, the test case report has been created for the News Website.


## School of Computing

## SRM IST, Kattankulathur – 603 203

**Course Code: 18CSE373T-E**

**Course Name: Programming In Java Script**

| | |
|---|---|
| **Experiment No** | 13 |
| **Title of Experiment** | Provide the details of Architecture Design/Framework/Implementation |
| **Team Members** | Aniket Bada Panda (RA2011033010053)<br>Garv Jaiswal [RA2011033010035]<br>Bedanta Gautom (RA2011033010048) |

**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 | RA2011033010053 | Aniket Bada Panda | Lead/Rep |
| 2 | RA2011033010035 | Garv Jaiswal | Member |
| 3 | RA2011033010048 | Bedanta Gautom | Member |

## Code:

**HTML -**

index.html U

News Website > index.html > html > body.m-0.p-0 > div.container-fluid.m-0.p-0

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
    <link rel="stylesheet" href="style.css">
    <title>News Website</title>
</head>

<body class="m-0 p-0">

    <div class="container-fluid m-0 p-0"

        <!-- navbar -->
        <div>
            <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
                <div class="container-fluid">
                    <a class="navbar-brand text-warning" href="#">NewsGlory</a>
                    <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
                        data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
                        aria-expanded="false" aria-label="Toggle navigation">
                        <span class="navbar-toggler-icon"></span>
                    </button>
                    <div class="collapse navbar-collapse" id="navbarSupportedContent">
                        <ul class="navbar-nav me-auto mb-2 mb-lg-0">
                            <li class="nav-item">
                                <a class="nav-link" aria-current="page" href="#general" id="general">General</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link" aria-current="page" href="#business" id="business" >Business</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link" href="#sports" id="sport">Sports</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link" aria-current="page" href="#tehnology" id="technology">Technology</a>
                            </li>
```

index.html U

News Website > index.html > html > body.m-0.p-0 > div.container-fluid.m-0.p-0

```
41                          <li class="nav-item">
42                              <a class="nav-link" href="#entertainment" id="entertainment">Entertainment</a>
43                          </li>
44                      </ul>
45                      <form class="d-flex">
46                          <input class="form-control me-2" type="text" id="newsQuery" placeholder="Search news">
47                          <button class="btn btn-outline-warning" type="button" id="searchBtn">Search</button>
48                      </form>
49                  </div>
50              </div>
51          </nav>
52      </div>
53
54      <!-- News  -->
55      <div>
56          <div class="row m-3" id="newsType"></div>
57          <div class="row me-2 ms-2" id="newsdetails"></div>
58      </div>
59
60      <!-- footer -->
61      <div class="mt-5">
62          <div>
63              <nav class="navbar navbar-expand-lg navbar-dark bg-dark mt-4">
64                  <div class="container-fluid m-0 p-0">
65                      <h5 class="text-white me-auto ms-auto">World<span class="text-warning">News</span></h5>
66                  </div>
67              </nav>
68          </div>
69      </div>
70
71  </div>
72
73
74  <script src="index.js"></script>
75  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
76      integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p"
77      crossorigin="anonymous"></script>
78  </body>
79
80  </html>
```

**JavaScript -**

index.html U | index.js U

News Website > index.js > ...

```
// variables
const generalBtn = document.getElementById("general");
const businessBtn = document.getElementById("business");
const sportsBtn = document.getElementById("sport");
const entertainmentBtn = document.getElementById("entertainment");
const technologyBtn = document.getElementById("technology");
const searchBtn = document.getElementById("searchBtn");

const newsQuery = document.getElementById("newsQuery");
const newsType = document.getElementById("newsType");
const newsdetails = document.getElementById("newsdetails");

// Array
var newsDataArr = [];

// apis
const API_KEY = "60c06fa8db85420699cd776056ffc53e";
const HEADLINES_NEWS = "https://newsapi.org/v2/top-headlines?country=in&apiKey=";
const GENERAL_NEWS = "https://newsapi.org/v2/top-headlines?country=in&category=general&apiKey=";
const BUSINESS_NEWS = "https://newsapi.org/v2/top-headlines?country=in&category=business&apiKey=";
const SPORTS_NEWS = "https://newsapi.org/v2/top-headlines?country=in&category=sports&apiKey=";
const ENTERTAINMENT_NEWS = "https://newsapi.org/v2/top-headlines?country=in&category=entertainment&apiKey=";
const TECHNOLOGY_NEWS = "https://newsapi.org/v2/top-headlines?country=in&category=technology&pageSize=8&apiKey=";
const SEARCH_NEWS = "https://newsapi.org/v2/everything?q=";

window.onload = function() {
    newsType.innerHTML="<h4>Headlines</h4>";
    fetchHeadlines();
};


generalBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>General News</h4>";
    fetchGeneralNews();
});

businessBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>Business</h4>";
    fetchBusinessNews();
});

sportsBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>Sports</h4>";
    fetchSportsNews();
});

entertainmentBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>Entertainment</h4>";
    fetchEntertainmentNews();
});

technologyBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>Technology</h4>";
    fetchTechnologyNews();
});

searchBtn.addEventListener("click",function(){
    newsType.innerHTML="<h4>Search : "+newsQuery.value+"</h4>";
    fetchQueryNews();
});

const fetchHeadlines = async () => {
    const response = await fetch(HEADLINES_NEWS+API_KEY);
    newsDataArr = [];
    if(response.status >=200 && response.status < 300) {
        const myJson = await response.json();
        newsDataArr = myJson.articles;
```


index.html U
index.js U
News Website > index.js > ...
68 } else {
69 // handle errors
70 console.log(response.status, response.statusText);
71 newsdetails.innerHTML = "<h5>No data found.</h5>"
72 return;
73 }
74
75 displayNews();
76 }
77
78
79 const fetchGeneralNews = async () => {
80 const response = await fetch(GENERAL_NEWS+API_KEY);
81 newsDataArr = [];
82 if(response.status >=200 && response.status < 300) {
83 const myJson = await response.json();
84 newsDataArr = myJson.articles;
85 } else {
86 // handle errors
87 console.log(response.status, response.statusText);
88 newsdetails.innerHTML = "<h5>No data found.</h5>"
89 return;
90 }
91
92 displayNews();
93 }
94
95 const fetchBusinessNews = async () => {
96 const response = await fetch(BUSINESS_NEWS+API_KEY);
97 newsDataArr = [];
98 if(response.status >=200 && response.status < 300) {
99 const myJson = await response.json();
100 newsDataArr = myJson.articles;
101 } else {
102 // handle errors
103 console.log(response.status, response.statusText);
104 newsdetails.innerHTML = "<h5>No data found.</h5>"
105 return;
106 }
107
108 displayNews();
109 }
110
111 const fetchEntertainmentNews = async () => {
112 const response = await fetch(ENTERTAINMENT_NEWS+API_KEY);
113 newsDataArr = [];
114 if(response.status >=200 && response.status < 300) {
115 const myJson = await response.json();
116 console.log(myJson);
117 newsDataArr = myJson.articles;
118 } else {
119 // handle errors
120 console.log(response.status, response.statusText);
121 newsdetails.innerHTML = "<h5>No data found.</h5>"
122 return;
123 }
124
125 displayNews();
126 }
127
128 const fetchSportsNews = async () => {
129 const response = await fetch(SPORTS_NEWS+API_KEY);
130 newsDataArr = [];
131 if(response.status >=200 && response.status < 300) {
132 const myJson = await response.json();
133 newsDataArr = myJson.articles;
134 } else {

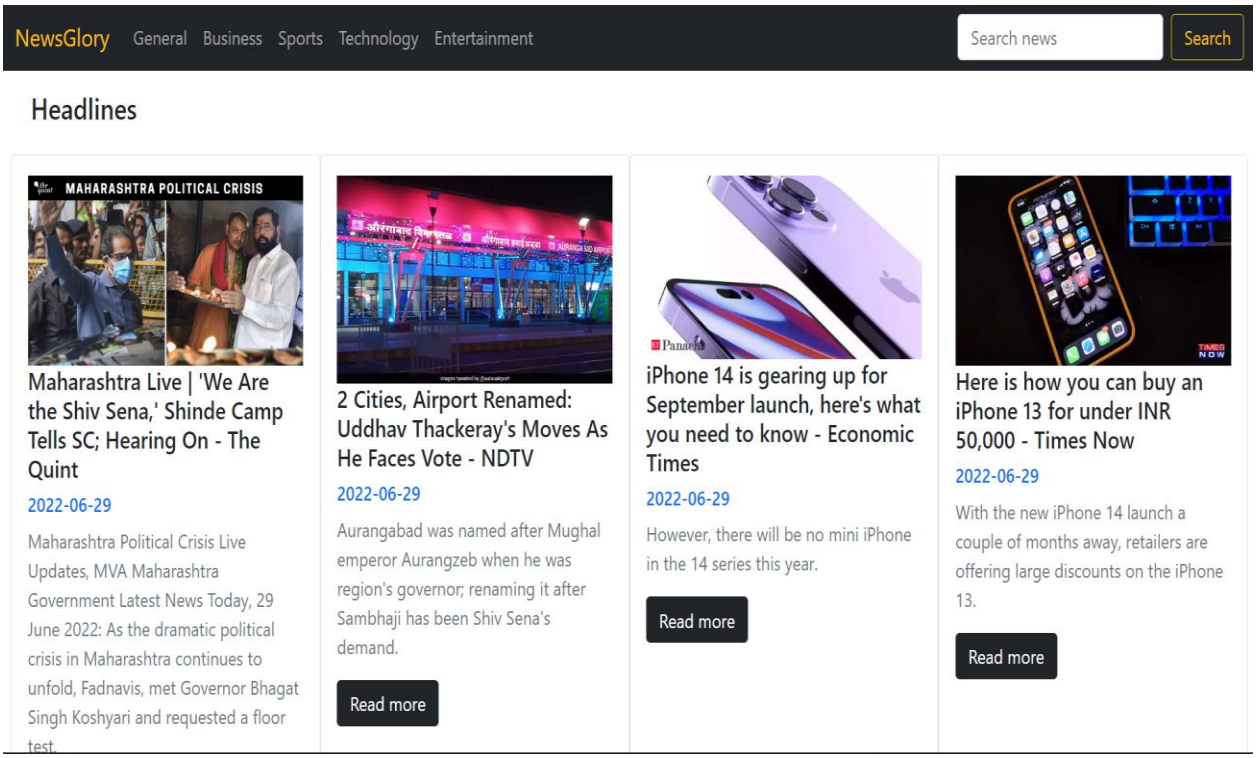
index.html U | index.js U

News Website > index.js > ...

```
135             // handle errors
136             console.log(response.status, response.statusText);
137             newsdetails.innerHTML = "<h5>No data found.</h5>"
138             return;
139         }
140 
141         displayNews();
142     }
143 
144     const fetchTechnologyNews = async () => {
145         const response = await fetch(TECHNOLOGY_NEWS+API_KEY);
146         newsDataArr = [];
147         if(response.status >=200 && response.status < 300) {
148             const myJson = await response.json();
149             newsDataArr = myJson.articles;
150         } else {
151             // handle errors
152             console.log(response.status, response.statusText);
153             newsdetails.innerHTML = "<h5>No data found.</h5>"
154             return;
155         }
156 
157         displayNews();
158     }
159 
160     const fetchQueryNews = async () => {
161 
162         if(newsQuery.value == null)
163             return;
164 
165         const response = await fetch(SEARCH_NEWS+encodeURIComponent(newsQuery.value)+"&apiKey="+API_KEY);
166         newsDataArr = [];
167         if(response.status >= 200 && response.status < 300) {
168             const myJson = await response.json();
169             newsDataArr = myJson.articles;
170         } else {
171             //error handle
172             console.log(response.status, response.statusText);
173             newsdetails.innerHTML = "<h5>No data found.</h5>"
174             return;
175         }
176 
177         displayNews();
178     }
179 
180     function displayNews() {
181 
182         newsdetails.innerHTML = "";
183 
184         // if(newsDataArr.length == 0) {
185         //     newsdetails.innerHTML = "<h5>No data found.</h5>"
186         //     return;
187         // }
188 
189         newsDataArr.forEach(news => {
190 
191             var date = news.publishedAt.split("T");
192 
193             var col = document.createElement('div');
194             col.className="col-sm-12 col-md-4 col-lg-3 p-2 card";
195 
196             var card = document.createElement('div');
197             card.className = "p-2";
198 
199             var image = document.createElement('img');
200             image.setAttribute("height","matchparent");
201             image.setAttribute("width","100%");
202             image.src=news.urlToImage;
```

Output-Implementation:

Screenshots:




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