

1. Project Profile

1.1 Project Description:

Newspapers were once the lifeline of the nation and were hailed as the fourth estate for its sheer power in forming public opinion and creating revolution on many issues. Now every morning the newspaper delivery boy comes to delivery newspaper. This system can be good replacer for hectic manual technique of newspaper distribution. This system helps to distribute newspaper online. Admin will be logging into the website and can manage newspaper online and also can generate bill. Then vendor can also login, look for Customer Subscription Customer need to register and login. To read the daily newspaper of their choice they need to subscribe the respective newspaper and pay monthly bill online.

1.2 Project Purpose:

Totally paperless transaction. Paperless transactions are financial transactions that take place without the need for physical paper documents. They are enabled by electronic payment systems, digital signatures, and other technologies that allow individuals and businesses to securely and conveniently exchange money and other forms of value.

Data management involves the acquisition, storage, retrieval and use of data in an organization. It includes a variety of activities such as the collection of data from various sources, the organization and storage of data in a database or other system, and the retrieval, analysis and interpretation of data for decision-making or reporting. Data management also includes protecting data from unauthorized access or manipulation, and ensuring data accuracy and integrity.

Easy way to payment method (prepaid)

User can be choice multiple options like (TOI, DB)

Provide summary reports of daily and monthly. Monthly summary reports provide a broader overview of the month's activities. These reports usually include a summary of key metrics, as well as summaries of specific activities or events that occurred in the month. They may also include data on customer trends, financial performance, and marketing initiatives.

1.3 Project Scope:

- Project scope is the part of project planning that involves determining and documenting.
- Admin change and modifying contain of the newspaper module.
- It prepaid services.
- Main reasons for the computerization of document.
- To improve the better services. (Provide ways for customers to easily contact you, such as a phone line or an online chat system.)
- Faster and accurate report generation.
- Save time.

1.4. MODULE OF SYSTEM:

1. Admin Module
2. User Module
3. Payment Module
4. View Customer Details
5. Login Module
6. Home
7. About
8. Contact us

2. Company Profile

2. Company profile:

2.1 History:

‘ENLIGHTEN INFOSYSTEMS’ is a Software and Web Development company in field of Information Technology. The company primarily engaged with Software and Website Designing and Development from last 5 years.

The Organization use latest technologies like .NET, C# .NET, ASP.NET, PHP, ORACLE, MYSQL, SQL server, and java etc.

2.2 Mission:

At ENLIGHTEN INFOSYSTEMS’ with Technical proficiency and Expertise, we cohesively integrate graphic design with web page layout, with interactive programming, with database driven content, to plan, build and deploy e-business and to emerge as one of the top IT service provider.

We at ‘ENLIGHTEN INFOSYSTEMS’ believe in teamwork. with every new day the quest for acquiring new competencies continues. Forever searching, experimenting, innovating, learning, moving ahead with our sincere efforts and dedication, shaping the future, and challenging our competencies to create new opportunities, is a never-ending process in the company.

At ‘ENLIGHTEN INFOSYSTEMS’ with Technical proficiency and expertise, we cohesively integrate graphic design with web page layout, with interactive programming, with database driven content, to plan, build and deploy e-business and to emerge as one of the Top IT service provider.

3.Project Planning

3.1 Project Planning

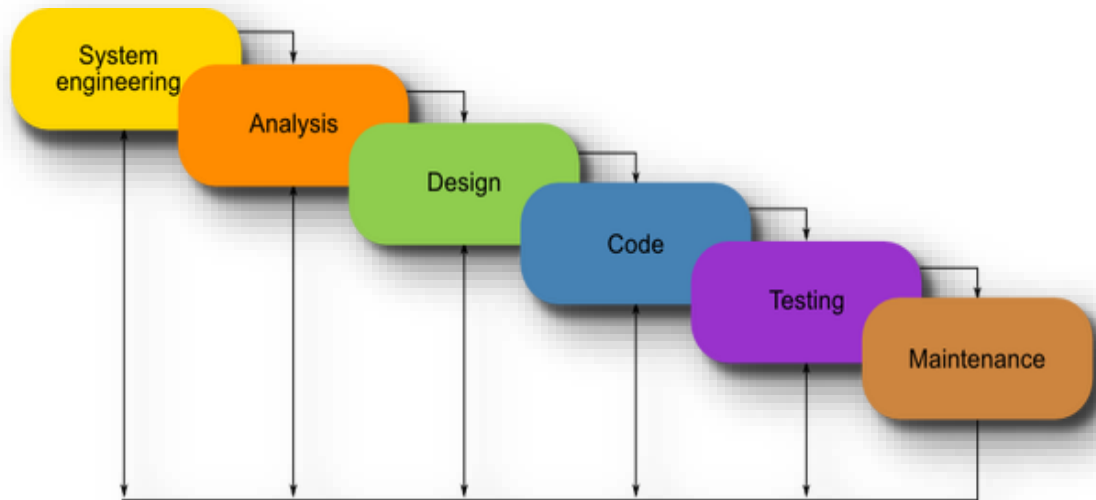
The Waterfall Model was the first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases.

The waterfall model is the earliest SDLC approach that was used for software development. The waterfall model illustrates the software development process in a linear sequential flow. This means that any phase in the development process begins only if the previous phase is complete. In this waterfall model, the phase does not overlap.

Waterfall Model-Design

The waterfall model emphasizes that a logical progression of steps be taken throughout the software development life cycle (SDLC), much like the cascading steps down an incremental waterfall. While the popularity of the waterfall model has waned over recent years in favor of more agile methodologies, the logical nature of the sequential process used in the waterfall method cannot be denied, and it remains a common design process in the industry.

Throughout this article we'll examine what specific stages make up the core of the waterfall model, when and where it is best implemented, and scenarios where it might be avoided in favor of other design philosophies.



Waterfall Model

The sequential phases in waterfall model are:

- **Requirements:** During this initial phase, the potential requirements of the application are methodically analyzed and written down in a specification document that serves as the basis for all future development. The result is typically a requirements document that defines *what* the application should do, but not *how* it should do it.
- **Analysis:** During this second stage, the system is analyzed in order to properly generate the models and business logic that will be used in the application.
- **Design:** This stage largely covers technical design requirements, such as programming language, data layers, services, etc. A design specification will typically be created that outlines how exactly the business logic covered in analysis will be technically implemented
- **Coding:** The actual source code is finally written in this fourth stage, implementing all models, business logic, and service integrations that were specified in the prior stages.
- **Testing:** During this stage, QA, beta testers, and all other testers systematically discover and report issues within the application that need to be resolved. It is not uncommon for this phase to cause a “necessary repeat” of the previous coding phase, in order for revealed bugs to be properly squashed.

- **Operations:** Finally, the application is ready for deployment to a live environment. The operations stage entails not just the deployment of the application, but also subsequent support and maintenance that may be required to keep it functional and up-to-date.

The Advantages of the Waterfall Model:

- Simple and easy to understand and use.
- Easy to manage due to the rigidity of the model. Each phase has specific deliverables and a review process.
- Phases are processed and completed one at a time.
- Works well for smaller projects where requirements are very well understood.
- Clearly defined stages.
- Well understood milestones.
- Easy to arrange tasks.
- Process and results are well documented.

The Disadvantages of the Waterfall Model:

- No working software is produced until late during the life cycle.
- High amounts of risks and uncertainty.
- Not a good model for complex and object-oriented projects.
- Poor model for long and ongoing projects.
- Not suitable for the projects where requirements are at a moderate to high risk of changing. So, risk and uncertainty is high with this process model.
- It is difficult to measure progress within stages.
- Cannot accommodate changing requirements.
- Adjusting scope during the life cycle can end a project.

Incremental Lifecycle Model:

- Incremental model is an evolution of waterfall model. The product is designed, implemented, integrated and tested as a series of incremental builds. It is a popular model software evolution used by many commercial software companies and system vendors.
- Incremental software development model may be applicable to projects where Generates working software quickly and early during the software life cycle.
- More flexible - less costly to change scope and requirements.

- Easier to manage risk because risky pieces are identified and handled during its iteration
- Easier to test and debug during a smaller iteration.

Basic Idea:

- Identify several design options: algorithm, data-structures, and files interface Protocols – and compare them.
- Analyses design to ensure it is technically feasible (i.e. validate its reliability).
- Analyses design to ensure it meets the specifications (i.e. validate its operational viability)
- Cost the system (i.e. validate its economic viability): Choose the best design to define what ‘best’ means for your particular project. It might mean the cheapest to manufacture, it might mean the fastest, and it might mean the smallest – it all depends on optimality.
- Validation: Simply stated, this test answers the questions: Have I built the right system? Does it satisfy the requirements? It may seem obvious, but you’d be surprised the number of times that the system which is built isn’t what is wanted at all. Compare the system’s behavior with the original requirements and system specification. Validation is extremely important and it should be carried out with great attention to detail.
- Verification: In this case, the questions are: Have I built the system right? Is it computing the right answer? This is what most people understand by testing.
- Evaluation: Finally, we ask: How good is the system? Again, the hallmark of good engineering: we seek to assess the systems performance and compare it to that of other similar systems. Ideally, you should identify some quantitative metric by which to.

3.2 PROJECT SCHEDULING

Project duration Estimation Technique Used.

We used learning-oriented technique. Learning-oriented techniques infer the duration estimation out of the past experiences and the differences between the old and the new project. The advantage of this class of techniques over the expertise-based ones is that in this case estimation are grounded on real life facts and on palpable examples and not on the general experience of the experts.

Estimation:

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	18
Date	4	11	18	25	1	8	15	22	29	5	12	19	26	3	24	7
Activity	December				January				February				March/April			
Feasibility Analysis																
Requirement Gathering																
Design																
Coding																
Testing																
Implementation																
Documentation																

4. System Analysis

4. System Analysis

4.1 Feasibility Study:

A feasibility study is performed by a company when they want to know whether a project is possible given certain circumstances. Feasibility studies are undertaken under many circumstances – to find out whether a company has enough money for a project, to find out whether the product being created will sell, or to see if there are enough human resources for the project. A good feasibility study will show the strengths and deficits before the project is planned or budgeted for. By doing the research beforehand, companies can save money and resources in the long run by avoiding projects that are not feasible.

There are many different types of feasibility studies, here is a list of some of the most common:

- **Technical Feasibility** – Does the company have the technological resources to undertake the project? Are the processes and procedures conducive to project success?
- **Economic Feasibility** – Given the financial resources of the company, is the project something that can be completed? The economic feasibility study is more commonly called the cost/benefit analysis.
- **Operational Feasibility** – This measure how well your company will be able to solve problems and take advantage of opportunities that are presented during the course of the project

4.2 Fact Finding Techniques:

Definition of Fact-finding Techniques:

Fact finding is process of collection of data and information based on techniques which contain sampling of existing documents, research, observation, questionnaires, interviews, prototyping and joint requirements planning. System analyst uses suitable fact-finding techniques to develop and implement the current existing system. Collecting required facts are very important to apply tools in System Development Life Cycle because tools cannot be used efficiently and effectively without proper extracting from facts. Fact-finding techniques are used in the early stage of System Development Life Cycle including system analysis phase, design and post implementation review. Facts included in any information system can be tested based on three steps: data- facts used to create useful information, process- functions to perform the objectives and interface- designs to interact with users.

Fact-finding techniques:

- Questionnaires
- Interviews
- Record View
- Observation

1. Questionnaires:

Questionnaires are also one of useful fact-finding technique to collect information from large number of users. Users fill up the questions which are given by the system analyst and then give the answers back to the system analyst. Questionnaires can save time because system analyst does not need to interview each of users and if the time of interview is short, questionnaires are more useful. To fulfill the requirements of the system objective, system analyst should have the ability to clearly define the design and frame of questionnaires.

There are two types of questionnaires:

- **Free-format questionnaires:** In free-format questionnaires, users are allowed to answer questions freely without immediate response. The results are also useful in learning about feelings, opinions, and experiences of the respondents.

→ **Fixed-format questionnaires:** The purpose of fixed-format questionnaires is to gather information from predefined format of questions. Users are allowed to choose the result from the given answers. There are three types of fixed-format questions: multiple-choice questions (Yes or No type), rating questions (Strongly agree, Agree, No opinion, Disagree, Strongly disagree), ranking questions (numbering according to the preferences).

2. Interview:

Interview is the most commonly used technique to collect information from the face-to-face interviews. The purpose of interview is to find, verify, clarify facts, motivate end-users involved, identify requirements and gather ideas and opinions. The role of interview includes interviewer who is system analyst and interviewee who are system owner or user. Interviewing technique needs good communication skills for interaction between system analyst and user.

There are two types of interviews.

→ **Unstructured interviews:**

An interview that is conducted with only a general goal or subject in mind and with few, if any, specific questions (Bentley, Whitten, 2007). Open-ended questions type is used in unstructured interview that allows user to answer freely in an appropriate way.

→ **Structured interviews:** Structured interview is an interview which contains predefined set of questions. In structured interview, close-ended questions type is used to limit answers to specify choices, short and direct responses from the interviewees.

3. Record Review:

Records and reports are the collection of information and data accumulated over the time by the users about the system and its operations. This can also put light on the requirements of the system and the modifications it has undergone. Records and reports may have a limitation if they are not up-to-date or if some essential links are missing. All the changes, which the system suffers, may not be recorded.

The analyst may scrutinize the records either at the beginning of his study which may give him a fair introduction about the system and will make him familiar with it or in the end which will provide the analyst with a comparison between what exactly is/was desired from the system and its current working.

One drawback of using this method for gathering information is that practically the functioning of the systems is generally different from the procedure shown in records. So analyst should be careful in gathering information using this method.

4. **Observation of the work environment:**

Another fact-finding technique is observation. In this technique, system analyst participates in the organization, studies the flow of documents, applies the existing system, and interacts with the users. Observation can be a useful technique when the system analyst has user point of view. Sampling technique called work sampling is useful for observation. By using this technique, system analyst can know how employees spend their days.

Tools and Technology Used:

Platform	Microsoft Windows
Operating system	Windows
Text-Editor	Sub-lime, Notepad++
Technology	Front-end: HTML, PHP, JavaScript Back-end: My SQL 5.5.24
Web-server	XAMP

System Requirement:

Minimum RAM	256MB
Hard Disk	40 GB
Processor	Intel Pentium 4
Operating System	Windows

About PHP:

- PHP (recursive acronym for *PHP: Hypertext Preprocessor*) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.
- PHP is a server-side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix-side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C-Like.

Common uses of PHP:

- PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them.
- PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.
- You add, delete, and modify elements within your database through PHP.
- Access cookies variables and set cookies.
- Using PHP, you can restrict users to access some pages of your website.
- It can encrypt data.

Characteristics of PHP:

Five important characteristics make PHP's practical nature possible –

- Simplicity
- Efficiency
- Security
- Flexibility
- Familiarity

What is PHP File?

- PHP files can contain text, HTML, CSS, JavaScript, PHP code.
- PHP code is executed on the server, and the result is returned to the browser as plain HTML.
- PHP files have execution “.php”.

Why we use PHP?

A good benefit of using PHP is that it can interact with many different database languages including MySQL. We work with MySQL since this is also a free language so it makes sense to use PHP. Both PHP and MySQL are compatible with an Apache server which is also free to license. PHP can also run on Windows, Linux and Unix servers.

- Due to all these languages being free it is cheap and easy to setup and create a website using PHP.
- PHP also has very good online documentation with a good framework of functions in place. This makes the language relatively easy to learn and very well supported online. There are countless forums and tutorials on various PHP methods and problems so it is usually very easy to find help if you need it.
- Due to PHP being so accessible and cheap to setup there are a lot of people who know how to use the language which makes finding new employees proficient in this language less challenging.

About HTML:

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language.
- HTML describes the structure of Web pages using markup.
- HTML elements are the building blocks of HTML pages.
- HTML elements are represented by tags.
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on.
- Browsers do not display the HTML tags, but use them to render the content of the page.

Example:

```
<!DOCTYPE html>  
<html>
```

```

<head>
  <title>Page Title</title>
</head>
<body>
  <h1>My First Heading</h1>
  <p>My first paragraph. </p>
</body>
</html>

```

- HTML tags normally come **in pairs** like <p> and </p>
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, but with a **forward slash** inserted before the tag name

About CSS:

- **Cascading Style Sheets**, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.
- CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, and variations in display for different devices and screen sizes as well as a variety of other effects.
- CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Advantages of CSS:

- **CSS saves time** – you can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.
- **Pages load faster** – If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So less code means faster download times.
- **Easy maintenance** – To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

- **Superior styles to HTML** – CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
- **Multiple Device Compatibility** – Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.
- **Global web standards** – Now HTML attributes are being deprecated and it is being recommended to use CSS. So it's a good idea to start using CSS in all the HTML pages to make them compatible to future browsers.

About JQuery:

- JQuery is a lightweight, "write less, do more", JavaScript library.
- The purpose of jQuery is to make it much easier to use JavaScript on your website.
- JQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.
- JQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The JQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

About Code igniter:

- Code igniter is a one of the most widely used open source web application development framework written in PHP. Code igniter is considered to be very light weight, simple and elegant framework written in PHP Code igniter follows MVC design pattern, which offers great separation between logic and presentation.

- Code igniter is easy to learn rapid application development framework which saves lots of time writing everything from scratch. Code igniter framework comes with rich set of built-in libraries and helpers, which enables web developers to build full featured web application much faster while maintaining performance and security. Code igniter lets you focus on project development while taking care of all the complex part in background.
- Code igniter was created by **Elli slab** and is licensed under an **Apache/BSD-style** open source license so you are free to use it however you please it is now a project of **British Columbia Institute of Technology**.

Code igniter Features

Some of the key features of Code igniter framework are as follows

- Model-View-Controller Based System
- Extremely Light Weight
- Rich set of active record database classes.
- Query Builder Database Support
- Form and Data Validation
- Security and XSS Filtering
- Session Management
- Email Sending Class. Supports Attachments, HTML/Text email multiple protocols (Send mail, SMTP, and Mail) and more.
- File Uploading Class
- Pagination
- Zip Encoding Class
- Large library of “helper” functions

Why Code igniter?

- Below is a list of some important reasons to choose Code igniter for your next web development project Easy to learn and understand.
- No "installation" necessary
- No PHP version conflicts

- Support most of the major databases Rich set of built-in libraries and helpers for email, pagination, image manipulation, form edition, file uploading, etc.
- Easy caching operations Promotes professional and modern web development practices Promotes fast and secure web application development.
- Excellent documentation and has a huge community of active member.

Code igniter Advantage

- Code igniter Promotes rapid application development.
- Code igniter Promotes modular programming.
- Code igniter programming Code igniter is lightweight and more capable.
- Code igniter compatible with most web servers, numerous operating systems and platforms.
- Code igniter Does Not Require a Template Engine.
- Code igniter makes it easy to test or debug application.
- Code igniter makes deployment, deployment and maintenance simple and pleasing.
- Code igniter supports search-engine friendly URLs.
- Code igniter resources are easily available.
- Code igniter makes huge saving on cost and time.

5. System Design

5. System Design:

5.1 Use Case Diagram:

A Use Case Diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. ... The "actors" are people or entities operating under defined roles within the system.

What is a Use Case Diagram?

A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. In this context, a "system" is something being developed or operated, such as a web site. The "actors" are people or entities operating under defined roles within the system.

Why Make Use Case Diagrams?

Use case diagrams are valuable for visualizing the functional requirements of a system that will translate into design choices and development priorities.

They also help identify any internal or external factors that may influence the system and should be taken into consideration.

They provide a good high level analysis from outside the system. Use case diagrams specify how the system interacts with actors without worrying about the details of how that functionality is implemented.

Basic Use Case Diagram Symbols and Notations

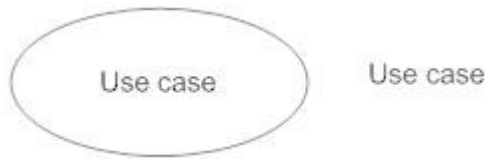
→ System

Draw your system's boundaries using a rectangle that contains use cases. Place actors outside the system's boundaries.



→ **Use case Draw**

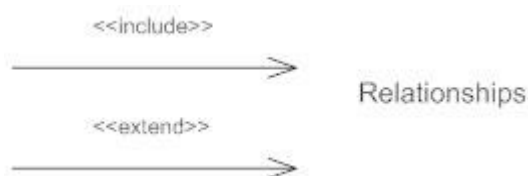
use cases using ovals. Label the ovals with verbs that represent the system's functions.

→ **Actors**

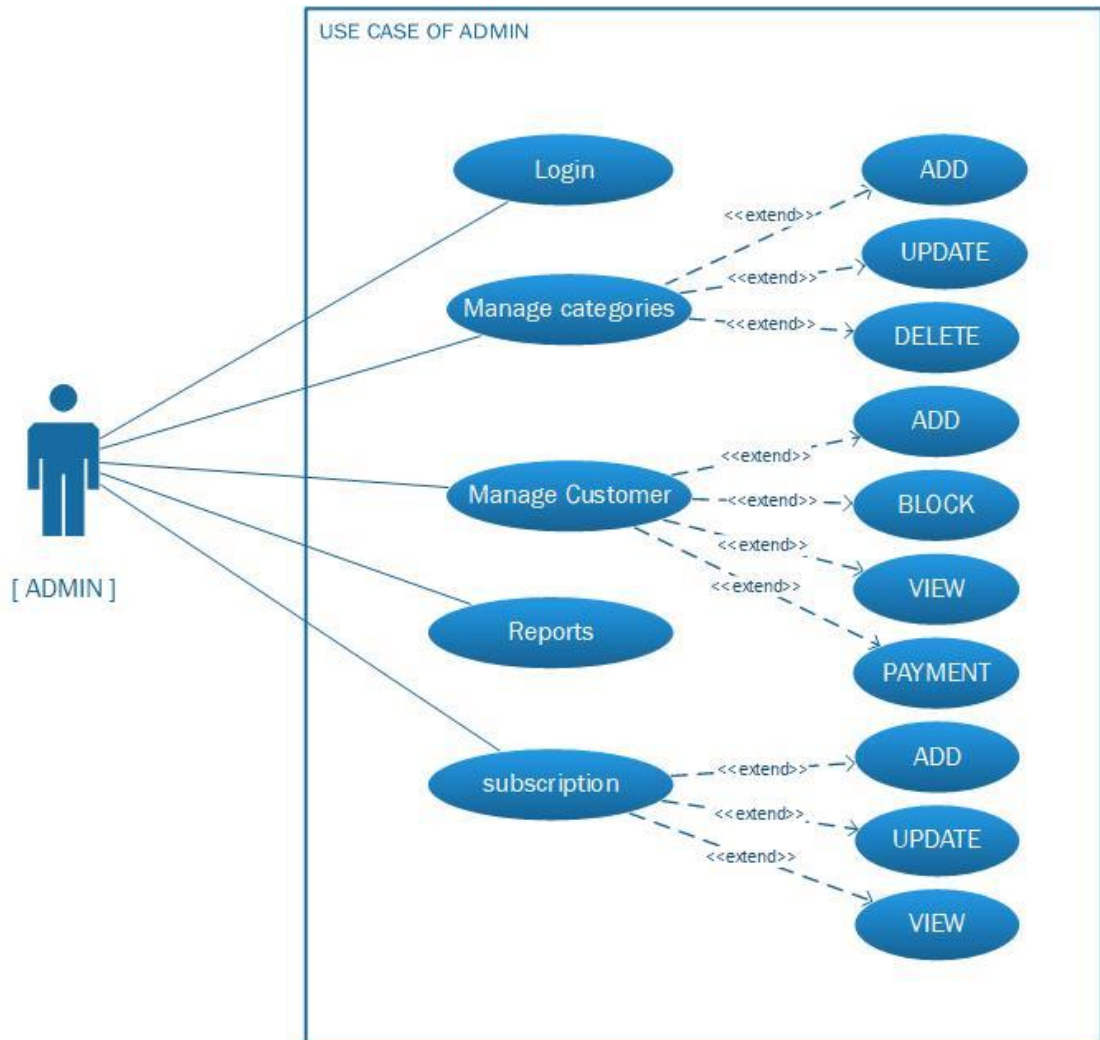
Actors are the users of a system. When one system is the actor of another system, label the actor system with the actor stereotype.

→ **Relationships**

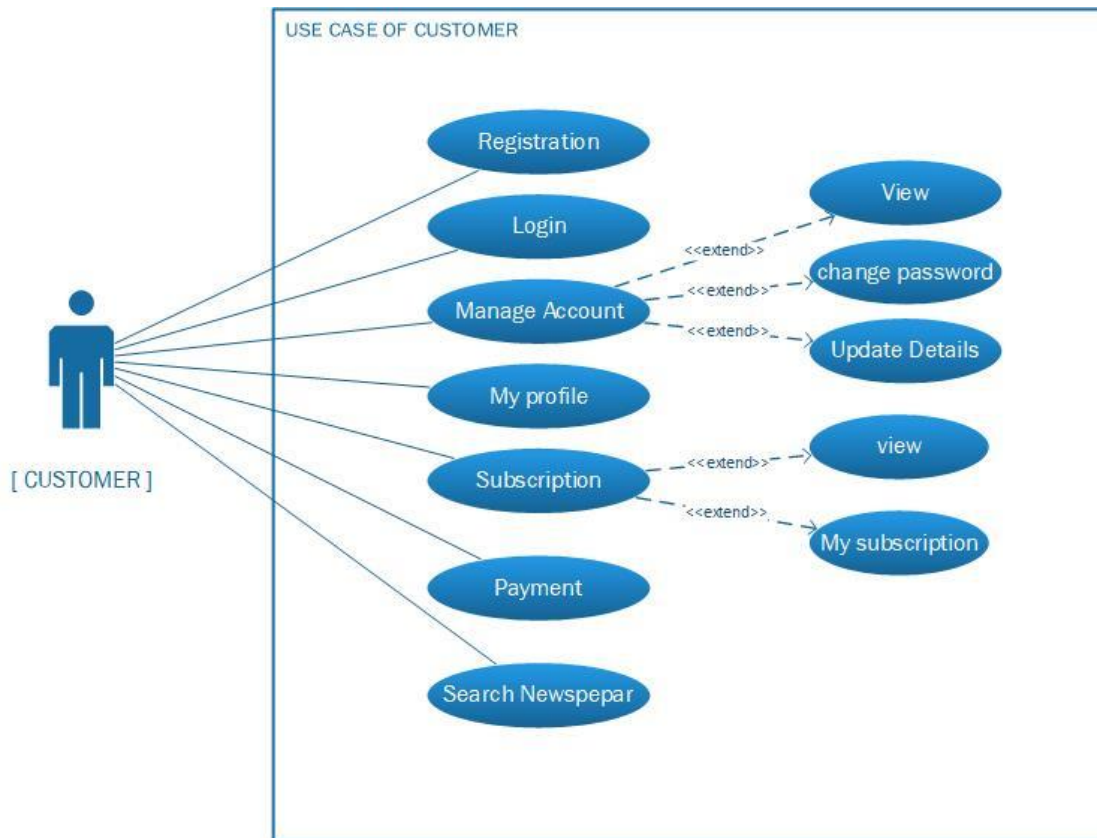
Illustrate relationships between an actor and a use case with a simple line. For relationships among use cases, use arrows labeled either "uses" or "extends." A "uses" relationship indicates that one use case is needed by another in order to perform a task. An "extends" relationship indicates alternative options under a certain use case.



→ Use Case Diagram: 1 [Admin]



→ Use Case Diagram: 2 [User]



5.2 Activity Diagram :

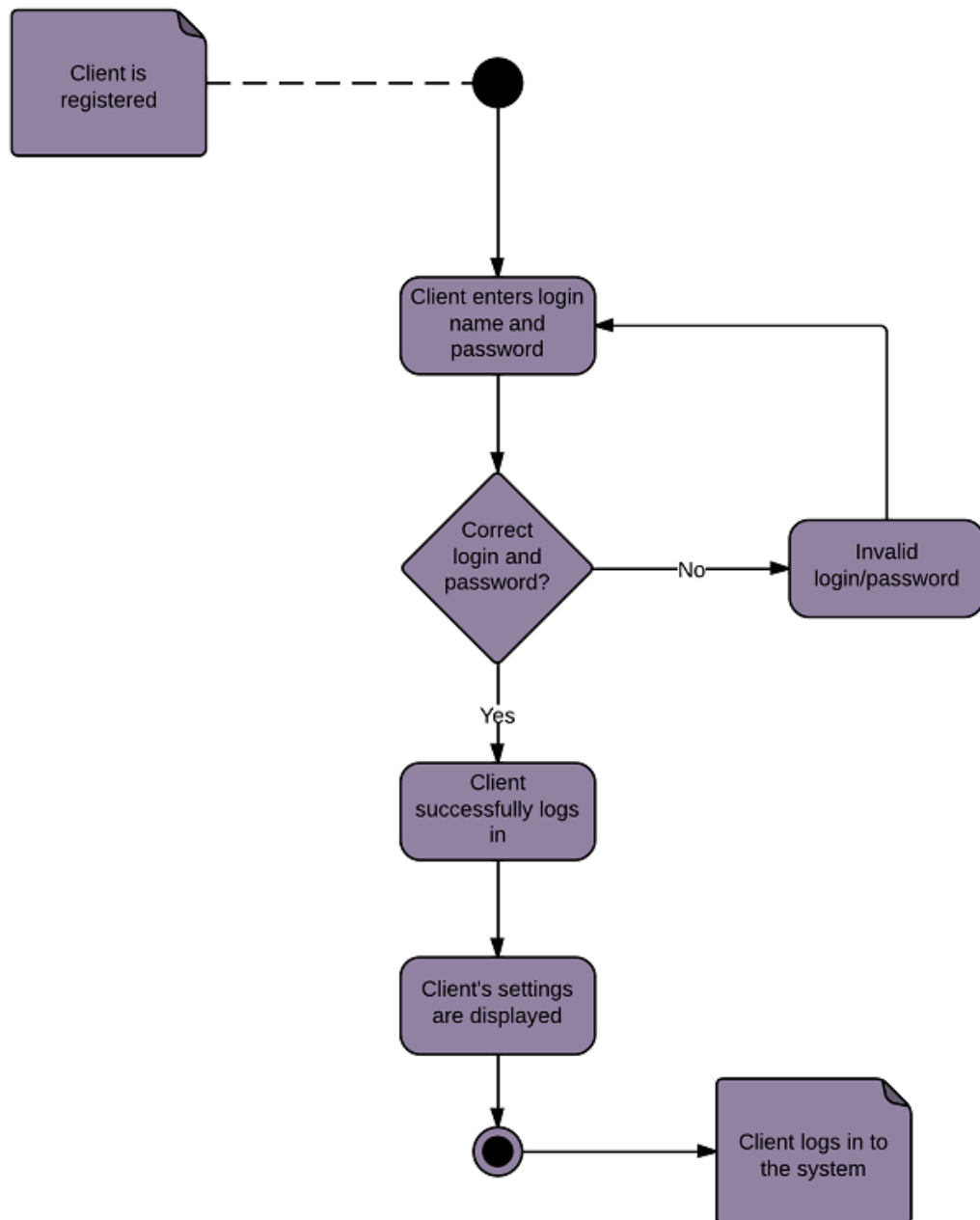
The Unified Modeling Language includes several subsets of diagrams, including structure diagrams, interaction diagrams, and behavior diagrams. Activity diagrams, along with use case and state machine diagrams, are considered behavior diagrams because they describe what must happen in the system being modeled.

Benefits of activity diagrams:

- Demonstrate the logic of an algorithm.
- Describe the steps performed in a UML use case.
- Illustrate a business process or workflow between users and the system.
- Simplify and improve any process by clarifying complicated use cases.

- Model software architecture elements, such as method, function, and operation.

A sample Activity Diagram is shown here.



Purpose of Activity Diagrams

The basic purposes of activity diagrams is similar to other four diagrams. It captures the dynamic behavior of the system. Other four diagrams are used to show the message flow from one object to another but activity diagram is used to show message flow from one activity to another.

Activity is a particular operation of the system. Activity diagrams are not only used for visualizing the dynamic nature of a system, but they are also used to construct the executable system by using forward and reverse engineering techniques. The only missing thing in the activity diagram is the message part.

It does not show any message flow from one activity to another. Activity diagram is sometimes considered as the flowchart. Although the diagrams look like a flowchart, they are not. It shows different flows such as parallel, branched, concurrent, and single.

The purpose of an activity diagram can be described as –

- Draw the activity flow of a system.
- Describe the sequence from one activity to another.
- Describe the parallel, branched and concurrent flow of the system.

How to Draw an Activity Diagram?

Activity diagrams are mainly used as a flowchart that consists of activities performed by the system. Activity diagrams are not exactly flowcharts as they have some additional capabilities. These additional capabilities include branching, parallel flow, swim lane, etc.

Before drawing an activity diagram, we must have a clear understanding about the elements used in activity diagram. The main element of an activity diagram is the activity itself. An activity is a function performed by the system. After identifying the activities, we need to understand how they are associated with constraints and conditions.

Before drawing an activity diagram, we should identify the following elements –

- Activities
- Association
- Conditions
- Constraints

Once the above-mentioned parameters are identified, we need to make a mental layout of the entire flow. This mental layout is then transformed into an activity diagram.

Following is an example of an activity diagram for order management system. In the diagram, four activities are identified which are associated with conditions. One important point should be clearly understood that an activity diagram cannot be exactly matched with the code. The activity diagram is made to understand the flow of activities and is mainly used by the business users

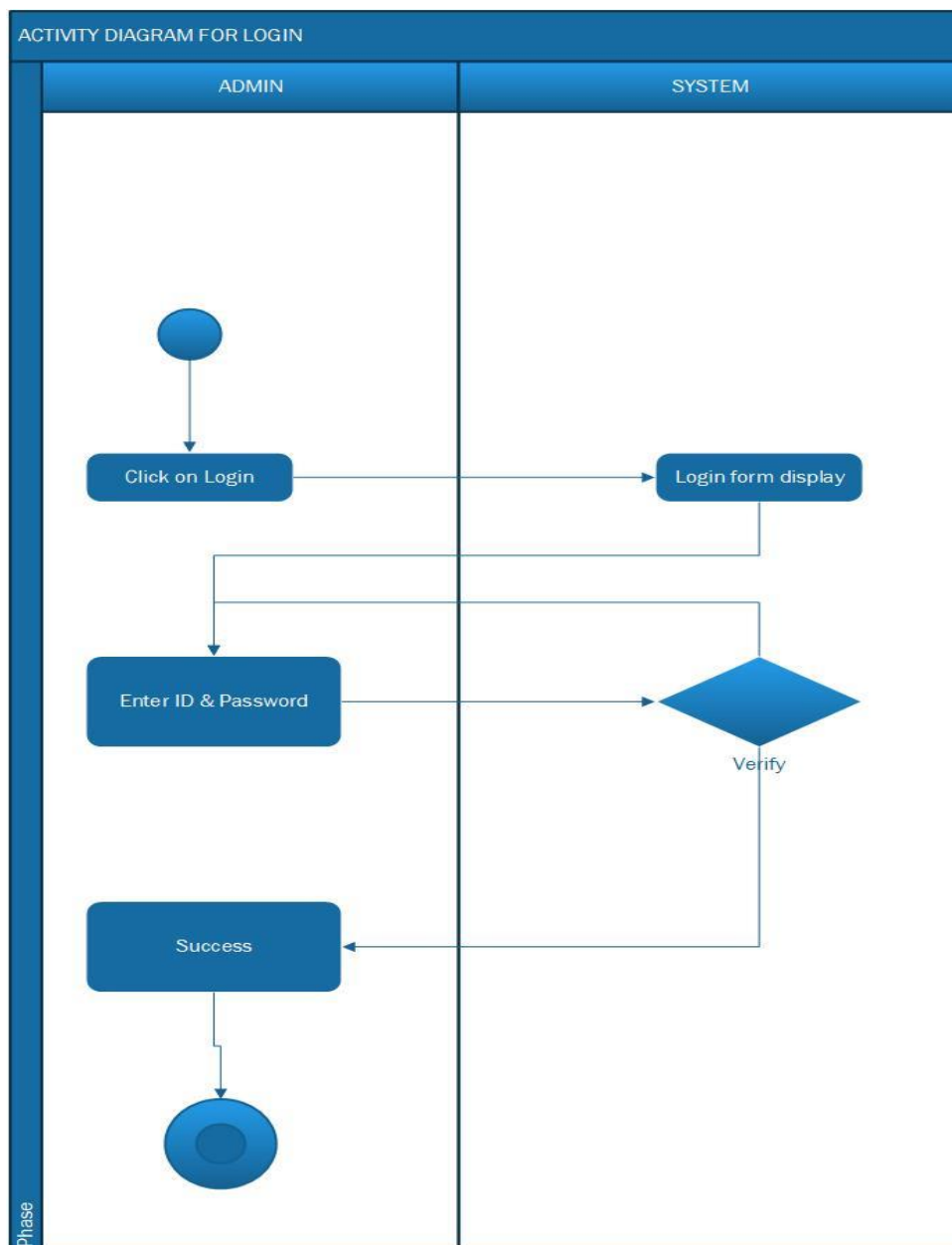
Following diagram is drawn with the four main activities –

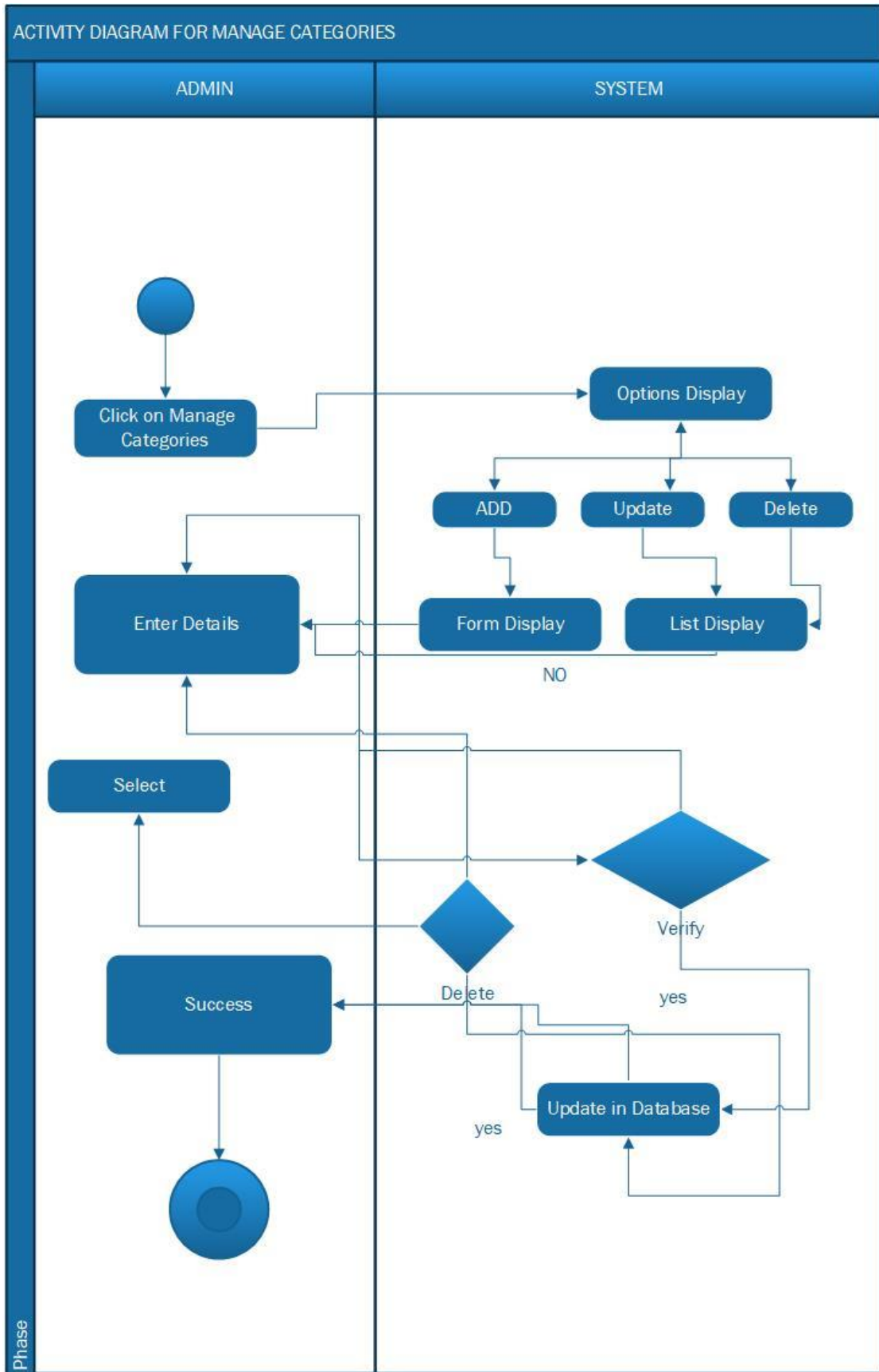
- Send order by the customer

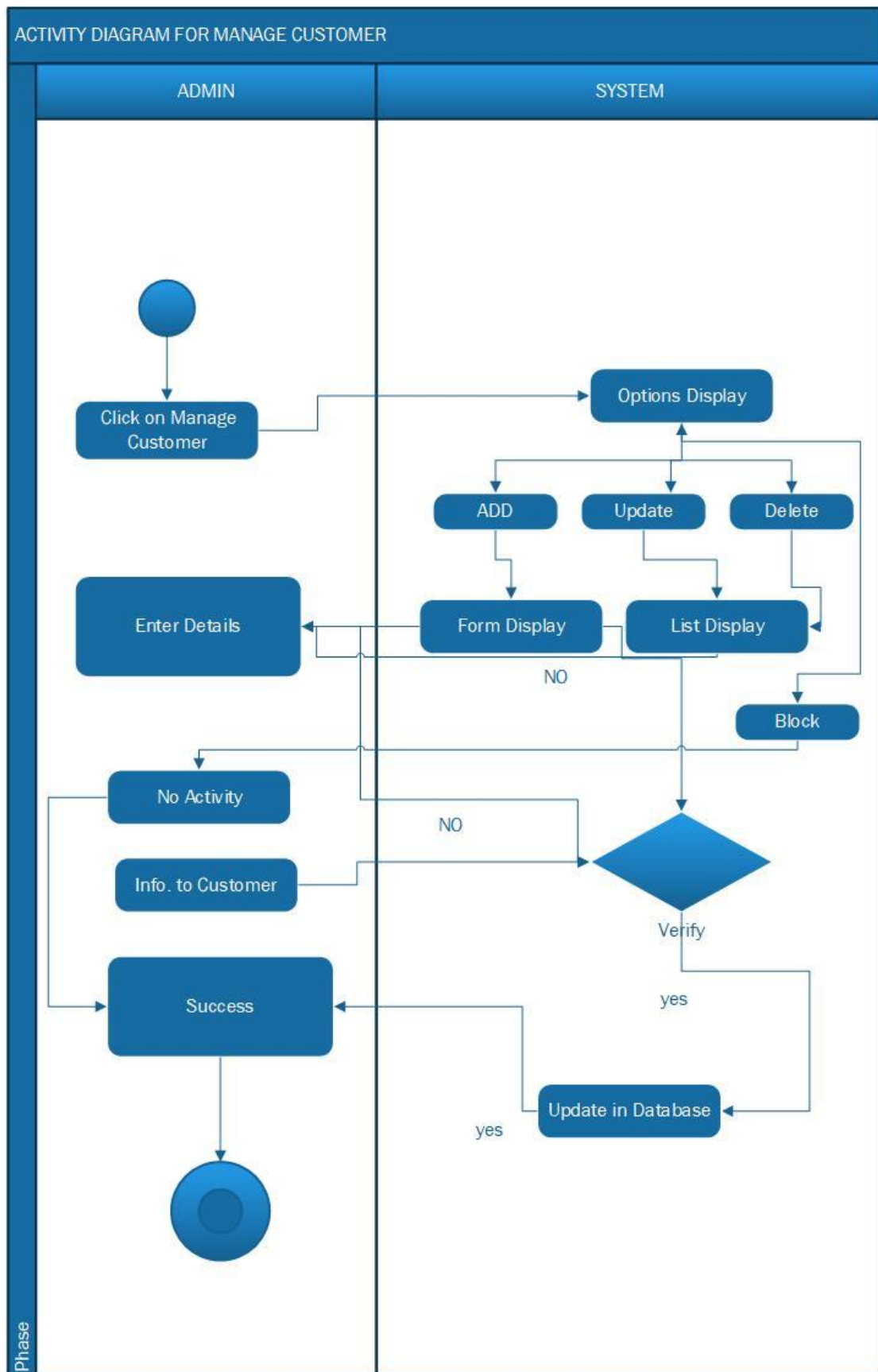
- Receipt of the order
- Confirm the order
- Dispatch the order

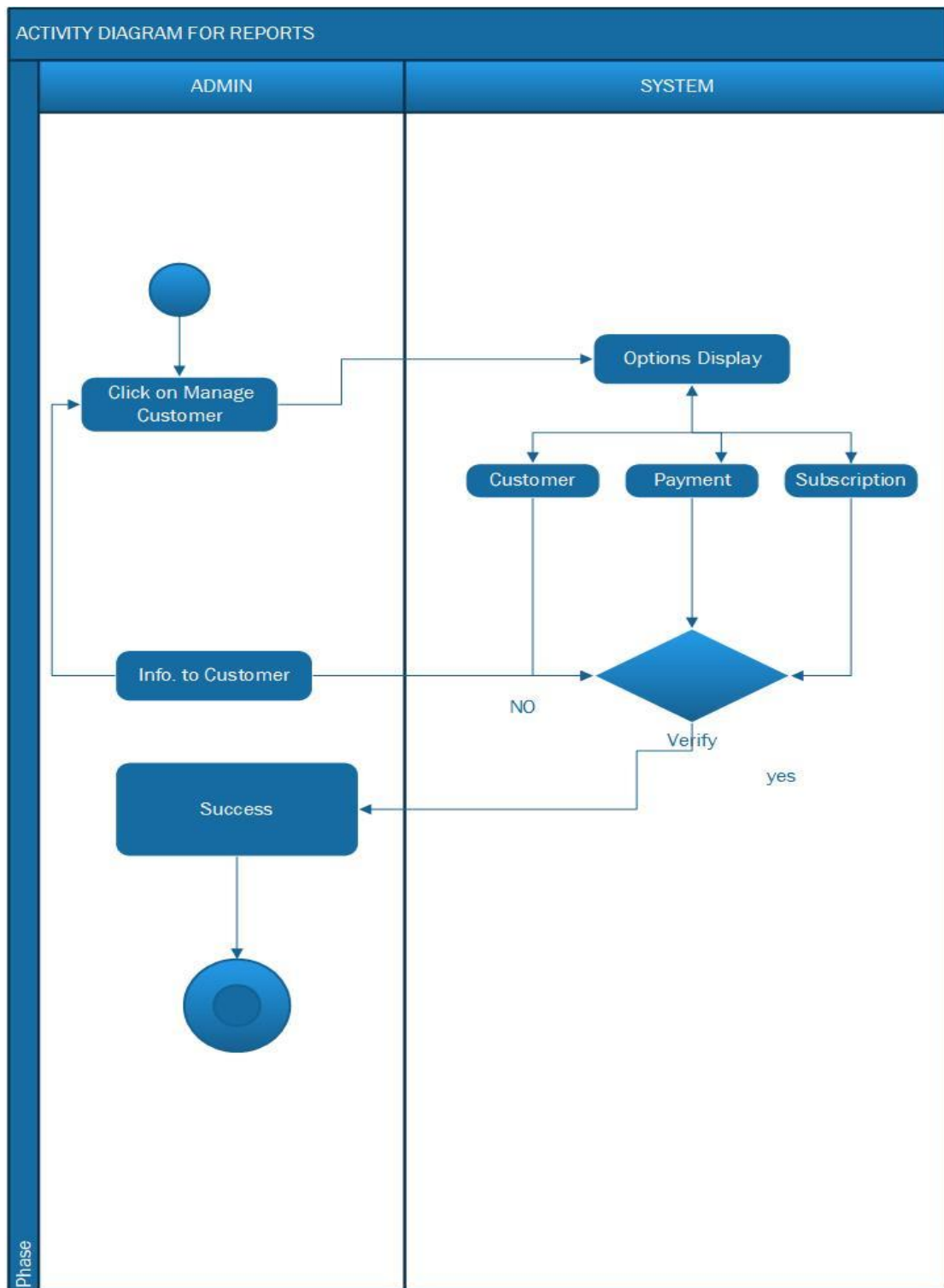
After receiving the order request, condition checks are performed to check if it is normal or special order. After the type of order is identified, dispatch activity is performed and that is marked as the termination of the process.

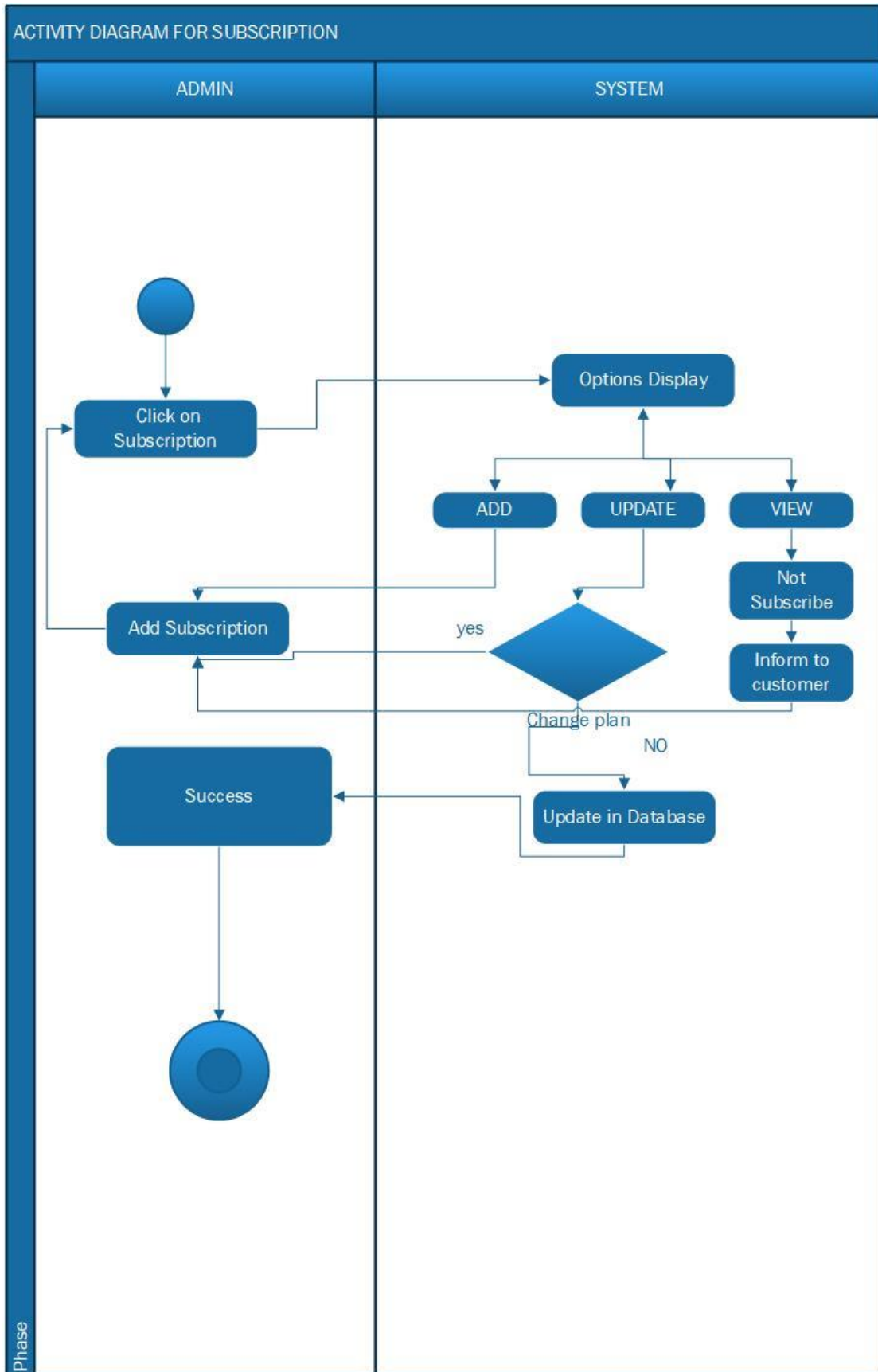
Activity Diagram:

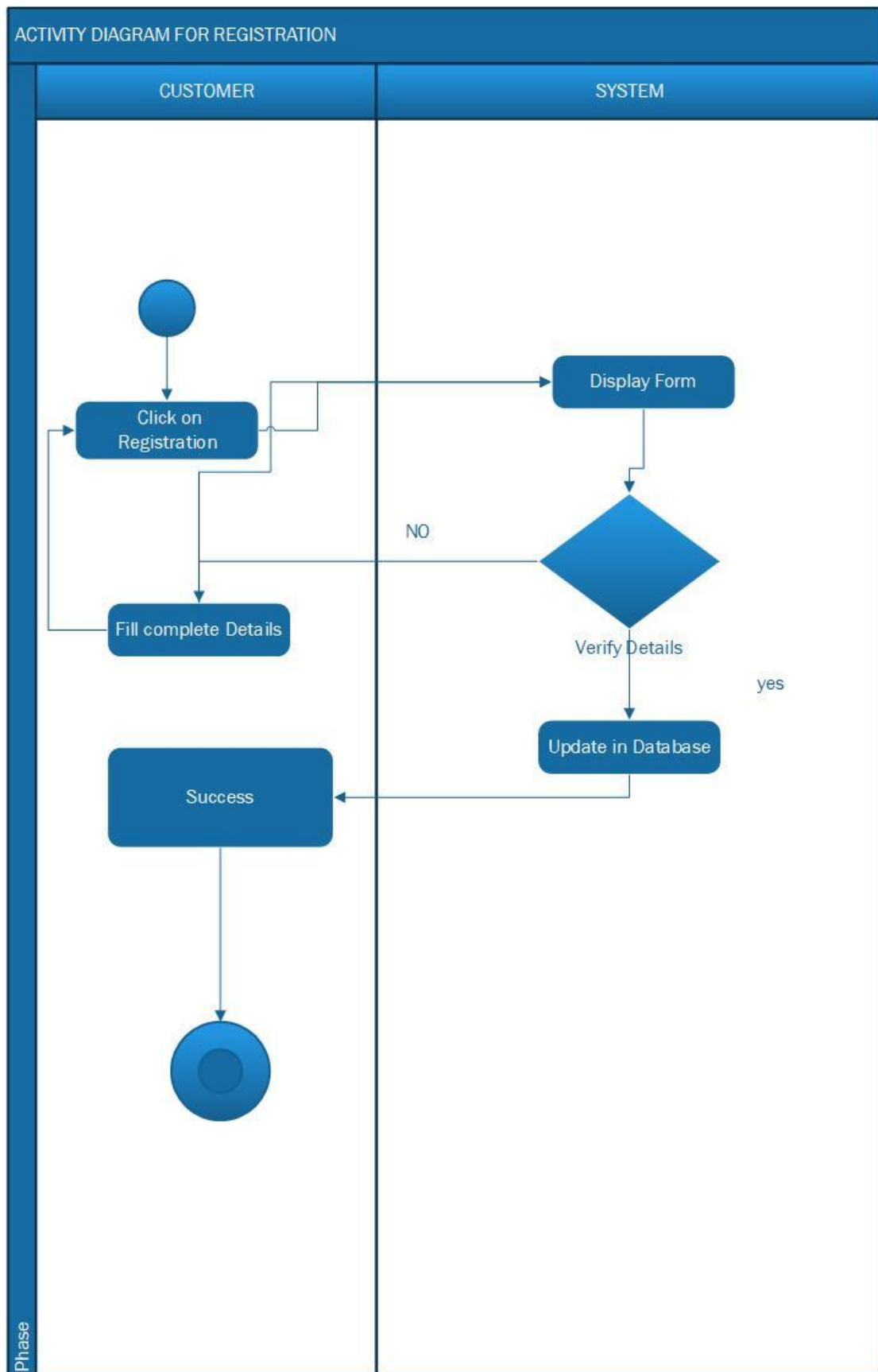


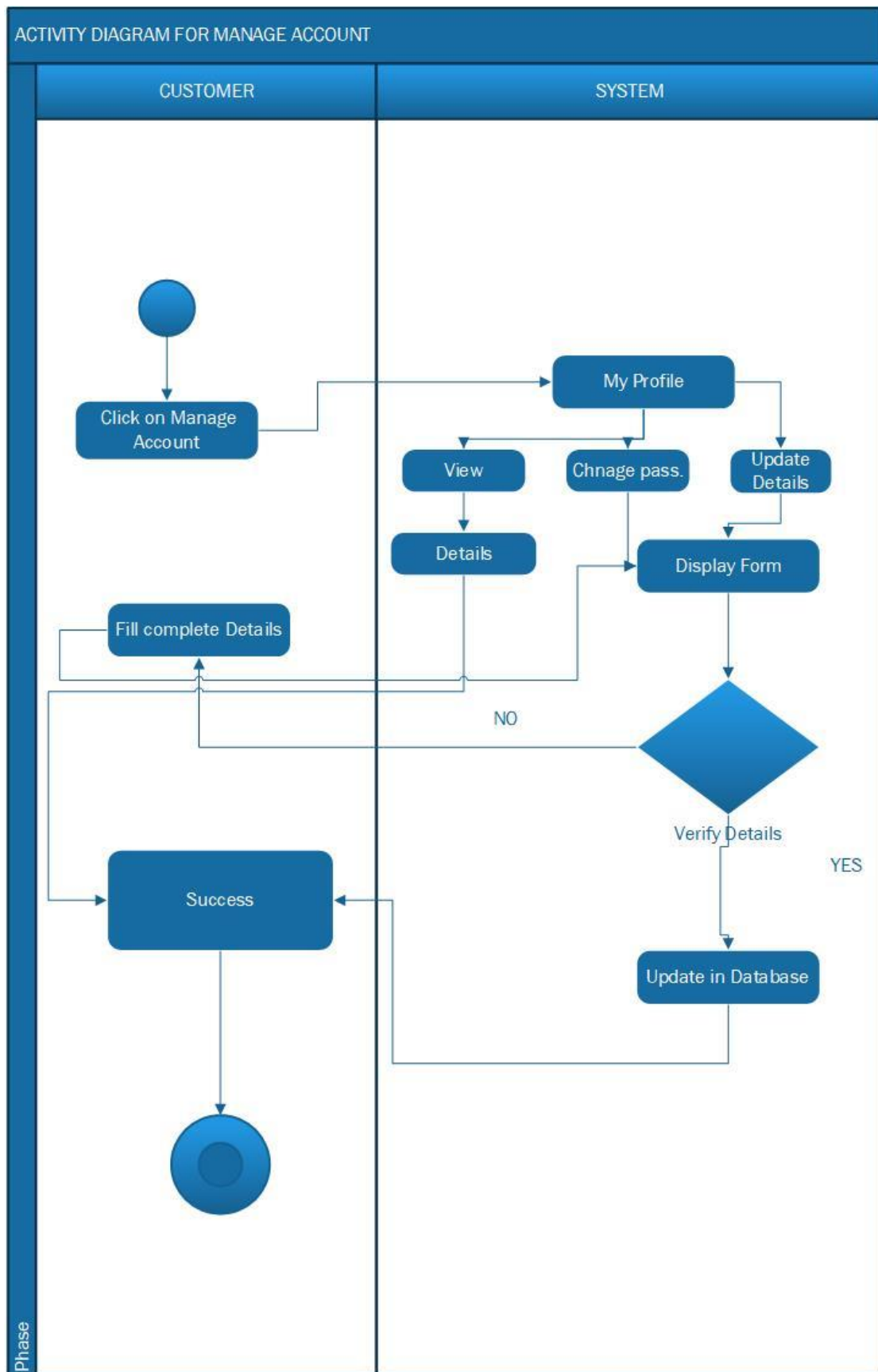


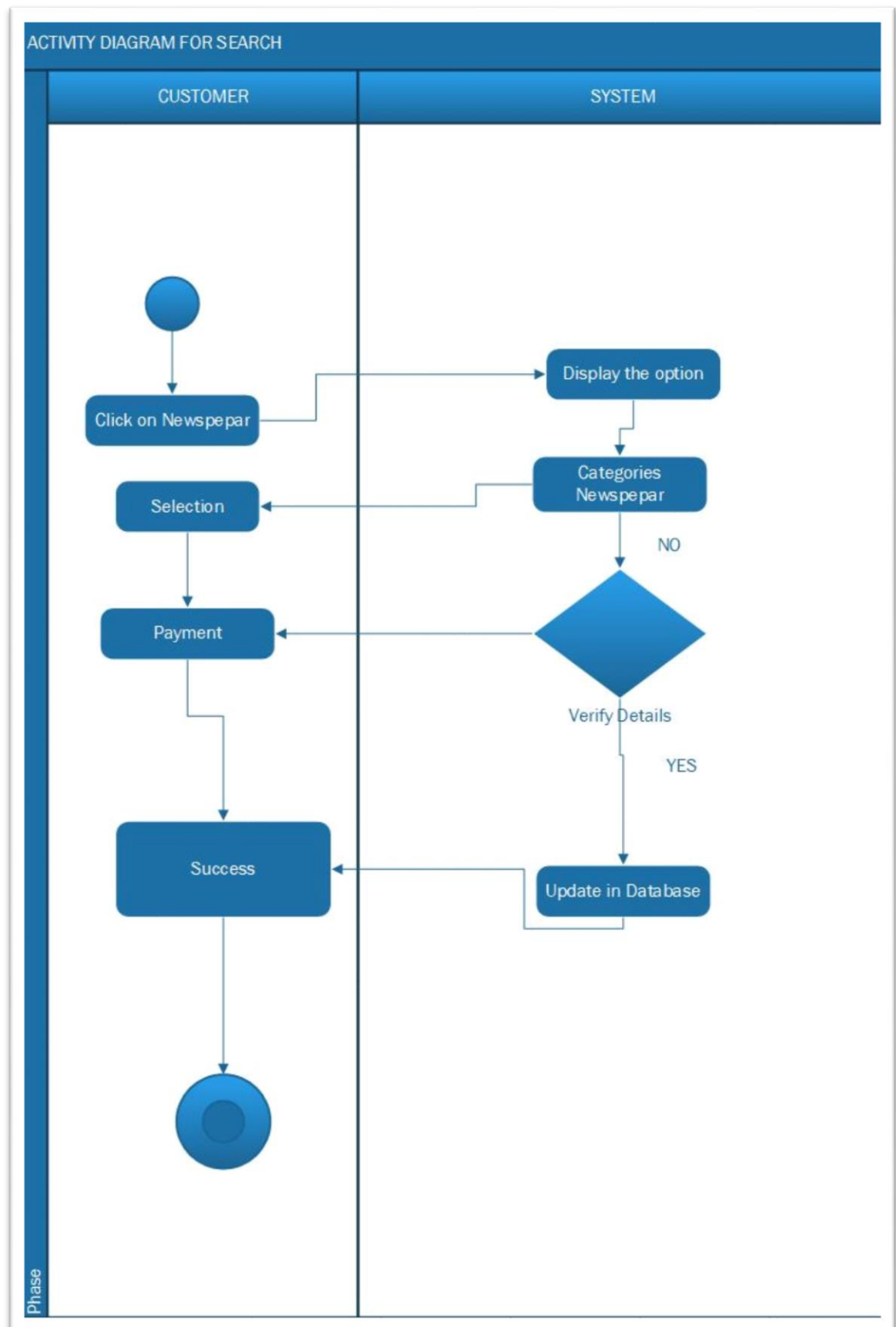












5.3 ERD Diagram :

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is an object, a component of data. An entity set is a collection of similar entities. These entities can have attributes that define its properties. By defining the entities, their attributes, and showing the relationships between them, an ER diagram illustrates the logical structure of databases.

ER diagrams are used to sketch out the design of a database.

Common Entity Relationship Diagram Symbols

An ER diagram is a means of visualizing how the information a system produces is related. There are five main components of an ERD:

→ **Entities**, which are represented by rectangles. An entity is an object or concept

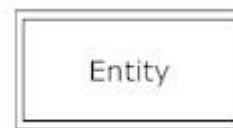
about which you want to store information.



A weak entity is an

entity that must be defined by a foreign key relationship with another entity as it cannot

be uniquely identified by its own attributes alone.



→ **Actions**, which are represented by diamond shapes, show how two entities share

information in the database.



In some cases, entities

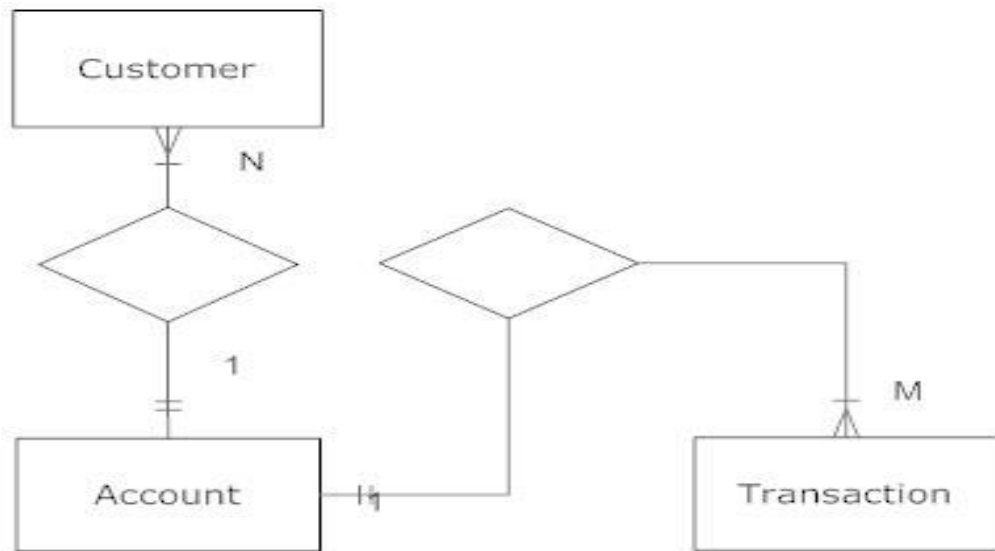
can

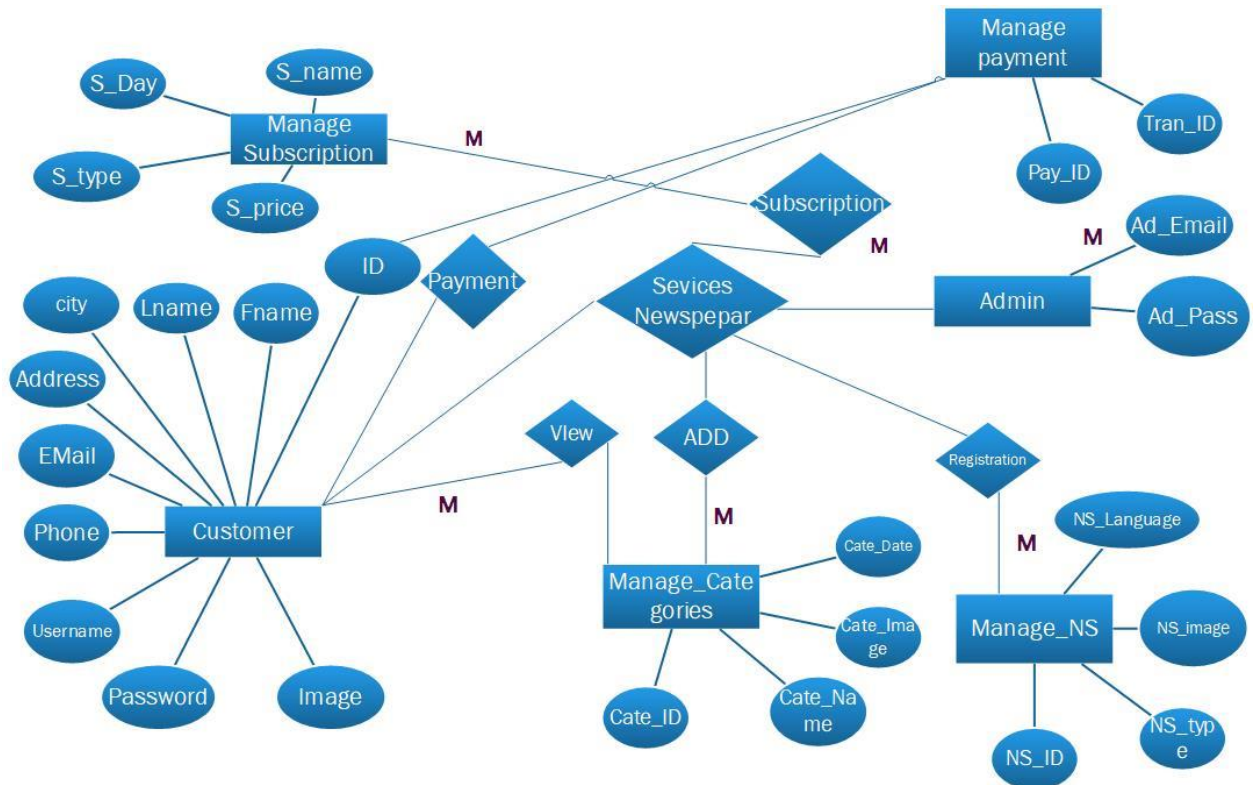
be self-linked. For example, employees can supervise other employees.

→ **Attributes**, which are represented by ovals. A key attribute is the unique, distinguishing characteristic of the entity. For example, an employee's social security number might be the employee's key attribute.

→ **Connecting lines**, solid lines that connect attributes to show the relationships of entities in the diagram.

→ **Cardinality** specifies how many instances of an entity relate to one instance of another entity. Ordinarily is also closely linked to cardinality. While cardinality specifies the occurrences of a relationship, ordinarily describes the relationship as either mandatory or optional. In other words, cardinality specifies the maximum number of relationships and ordinarily specifies the absolute minimum number of relationships.



ERD Diagram:

System Design:**DATABASE TABLES:**

1.Admin_ Login Table						
serial No.	Name of Field	Data type	size	Constraint	Allow Null	Description
1	Admin_Email	varchar	30	Primary key	-	Admin Email
2	Admin_Password	varchar	20	-	-	Admin Pass

2.Manage_Categories Table						
serial No.	Name of Field	Data type	size	Constraint	Auto. Incre.	Description
1	Cat_ID	int	5	Primary key	yes	Catego.id
2	Cat_Name	varchar	30	-	-	Name
3	Cat_Image	varchar	500	-	-	image
4	Cat_Date	date	-	-	-	-

3.Manage_Subscription Table

serial No.	Name of Field	Data type	size	Constraint	Auto. Incre.	Description
1	Sub_ID	int	5	Primary key	-	Sub. ID
2	Sub_Price	int	30	-	-	-
3	Sub_Type	varchar	500	-	-	Type of sub.
4	Sub_days	date	-	-	-	Total no. of days
5	Sub_Name	varchar	30	-	-	Name of the sub.

4.Manage_Customer Table

serial No.	Name of Field	Data type	size	Constraint	Auto. Incre.	Description
1	Cust_ID	int	5	Primary key	-	Cust ID
2	Cust_fname	varchar	30	-	-	First name
3	Cust_lname	varchar	500	-	-	Last name
4	Cust_city	date	-	-	-	city
5	Cust_address	varchar	50	-	-	Address
6	Cust_Email	varchar	20	Primary key	-	email
7	Cust_phone	int	10	-	-	phone
8	Cust_Username	varchar	20	Primary key	-	User name
9	Cust_password	varchar	20	Primary key	-	Password
10	Cust_Image	-	-	-	-	image

5.Manage_Payment Table

serial No.	Name of Field	Data type	size	Constraint	Auto. Incre.	Description
1	Pay_ID	int	5	Primary key	-	Payment ID
2	Cust_ID	int	5	-	-	Customer ID
3	Sub_ID	int	5	-	-	Subscription ID
4	Sub_days	date	-	-	-	Subscription Days
5	Sub_Name	varchar	30	-	-	Subscription Name
6	Transa_ID	int	5	-	-	Transaction ID

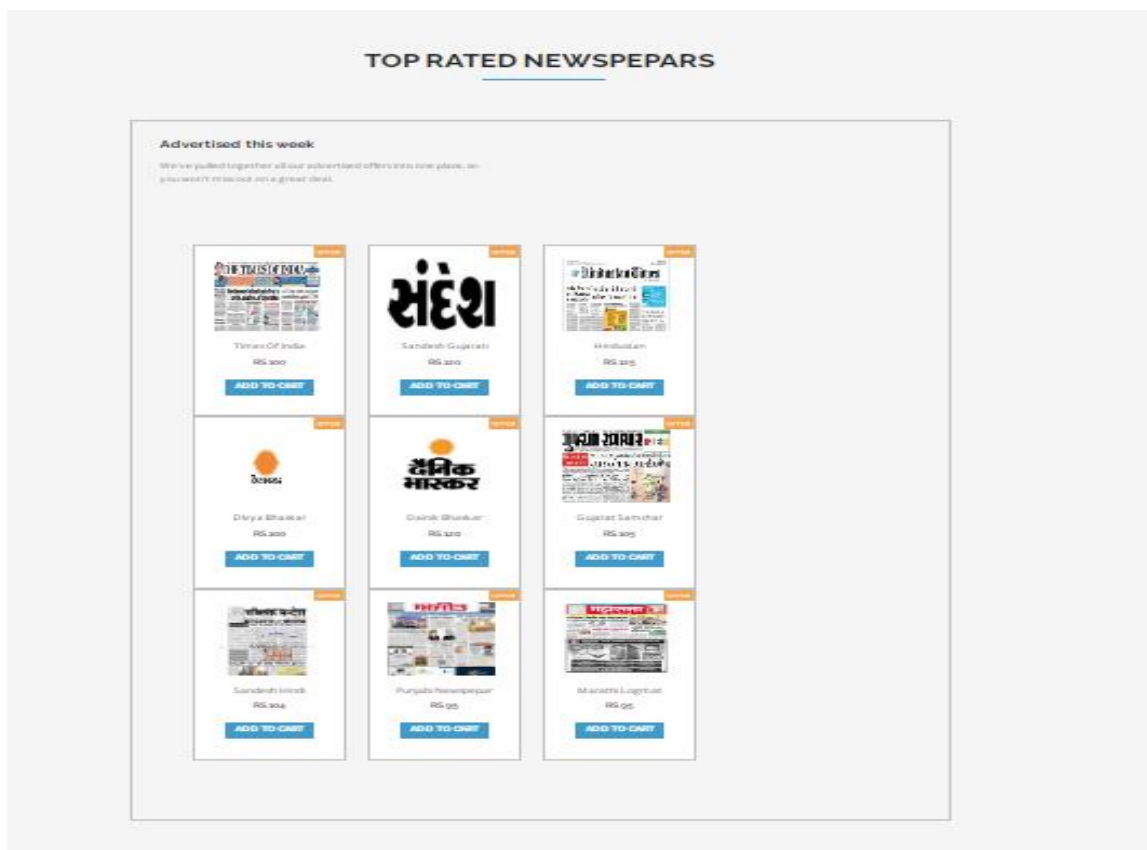
6.Manage_Newspepar Table

serial No.	Name of Field	Data type	size	Constraint	Auto. Incre.	Description
1	News_ID	int	5	Primary key	-	News ID
2	News_type	int	5	-	-	News Type
3	News_Iamge	-	-	-	-	image
4	News_language	varchar		-	-	language

6. Screen layouts

User panel:

1. Main page of our website:





CONTACT

- 1234k Avenue, 4th block, Vadodara
- Newswala123@gmail.com
- +91 8128135013

INFORMATION

- About Us
- Contact Us

PROFILE

- Login
- Create Account

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2. Customer login:

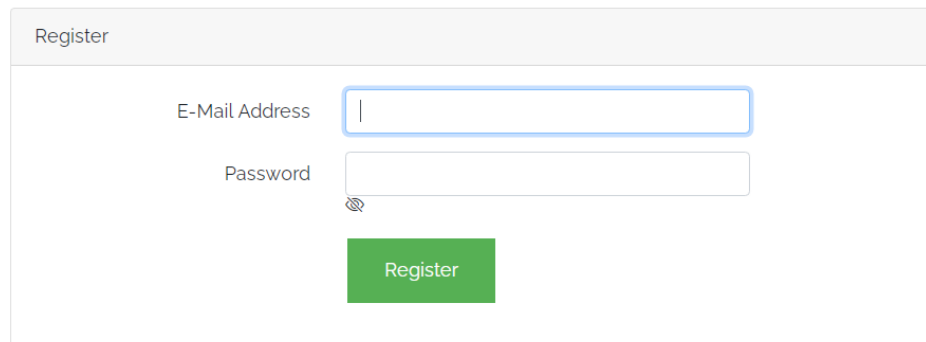
LOGIN FORM

[Forgot Password?](#)

FOR NEW PEOPLE

[Register Here](#) (Or) go back to [Home](#) >

3. Customer Verification form:



A registration form titled "Register" with a light gray header. It contains two input fields: "E-Mail Address" and "Password". The "E-Mail Address" field is highlighted with a blue border. Below the "Password" field is a small eye icon for toggling visibility. A green "Register" button is positioned below the password field.

4. OTP Though Verification:

localhost:8080 says

Register Successfully, OTP sent to pececej313@v2ssr.com

OK

5. OTP verification form:

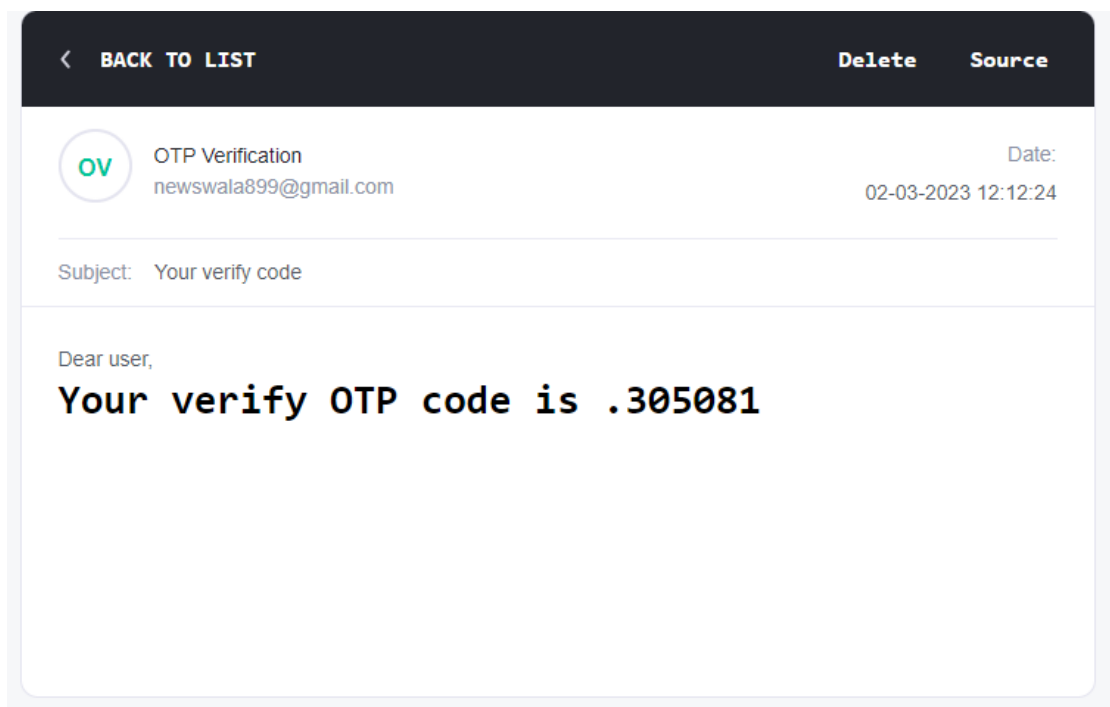
Verification Account

Verification Account

OTP Code

Verify

6. OTP Sending in Register mail ID:



7. Registration Form:

REGISTRATION CUSTOMER

Customer First Name:

Customer Last Name:

Email

Phone Number

Address

City

User Name


Image
 No file chosen

Password

Confirm Password

8. Update Customer Profile:

Account Settings



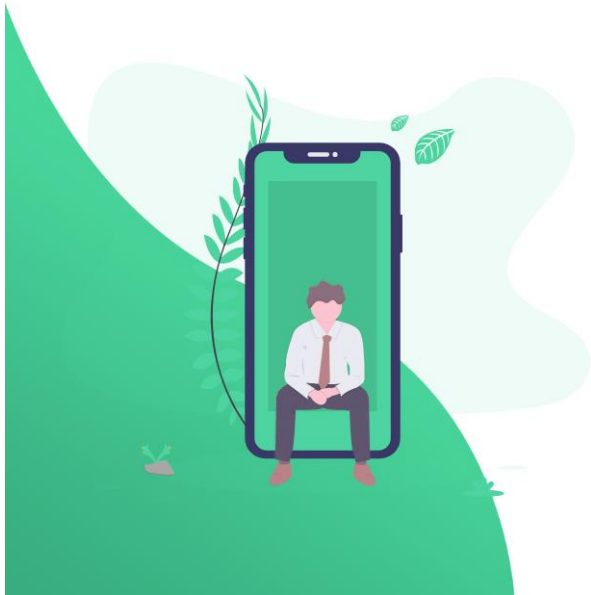
vaibhav shah


- Account
- Password

Account Settings

First Name	<input type="text" value="vaibhav"/>	Last Name	<input type="text" value="shah"/>
CITY	<input type="text" value="anand"/>	Email	<input type="text" value="vaibhav1243@gmail.com"/>
Phone number	<input type="text" value="2147483647"/>	User Name	<input type="text" value="vaibhav@12"/>
image	<input type="button" value="Choose File"/> No file chosen		
<input type="button" value="Update"/>			

Admin panel: 9. Admin Login:





ADMIN LOGIN

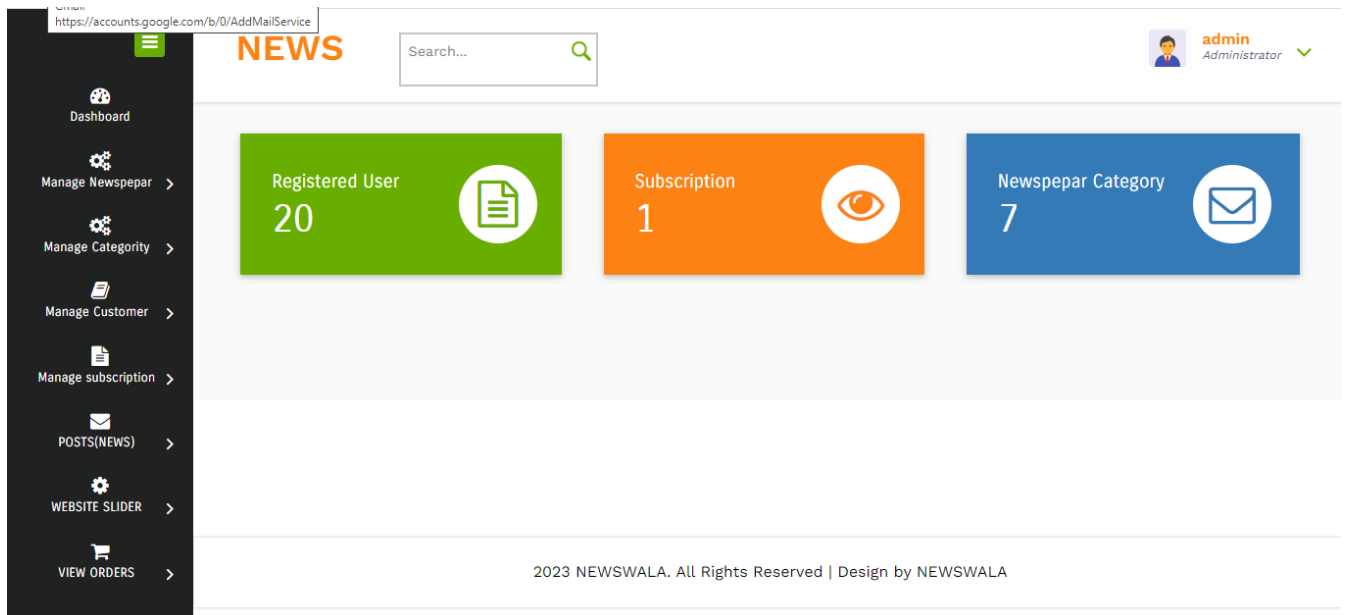
Email ID

Password

[Forgot Password?](#)
[BACK TO HOME](#)

SUBMIT

10. Dashboard:



The dashboard shows the following statistics:

Category	Count
Registered User	20
Subscription	1
Newspepar Category	7

The sidebar menu includes: Dashboard, Manage Newspepar, Manage Category, Manage Customer, Manage subscription, POSTS(NEWS), WEBSITE SLIDER, and VIEW ORDERS.

Footer: 2023 NEWSWALA. All Rights Reserved | Design by NEWSWALA

11. Add Newspapers:

Dashboard

Manage Newspaper >

Manage Category >

Manage Customer >

Manage subscription >

POSTS(NEWS) >

WEBSITE SLIDER >

VIEW ORDERS >

NEWS

Search...

admin Administrator

ADD NEWSPEPAR

NEWSPEPAR

ADD NEW CATEGORY OF THE NEWSPEPAR

1 TYPE

NEWS PEPAR TYPE

2 NEWSPEPAR PRICE & LANGUAGE

NEWSPEPAR PRICE

NEWSPEPAR LANGUAGE

3 NEWSPEPAR IMAGE

NEWSPEPAR IMAGE

Choose file No file chosen

upload

☐ You agree to our Terms and Policy.

12. Manage Newspapers:

Dashboard

Manage Newspaper >

Manage Category >

Manage Customer >

Manage subscription >

POSTS(NEWS) >

WEBSITE SLIDER >

VIEW ORDERS >



















NEWS

Search...

admin Administrator

MANAGE NEWSPEPAR

RECENT CATEGORIES

ID	NEWS TYPE	NEWS IAMGE	NEWS LANGUAGE	NEWS PRICE	ACTION
1	Sandesh Gujarati		Gujarati	120	 
2	Hindustan		English	125	 
3	Divya Bhaskar		Gujarati	100	 
4	Dainik Bhaskar		Hindi	120	 
5	Gujarat Samchar		Gujarati	105	 
6	Sandesh Hindi		Hindi	104	 

13. Update Categories:


NEWSPEPAR
ADD NEW CATEROTY OF THE NEWSPEPAR

2

News type

Sandesh Gujarati

News image



Choose file No file chosen

News Language

Gujarati

News Price


120










Update Catagory

14. Customer Details:

NEWS

Search...



Customer ID	Fname	Lname	City	Address	Email	Phone	image	Action
1	JENISH	SHAH	anand	Anand	kevin.ptl214@gmail.com	81281540139		Edit Delete Email
2	vaibhav	shah	anand	vidya nagar	vaibhav1243@gmail.com	2147483647		Edit Delete Email
3	Ajay	shah	anand	Anand	vaibhav12367@gmail.com	2147483647		Edit Delete Email
4	vaibhav	shah	anand	Anand	vaibhav123jhk@gmail.com	2147483647		Edit Delete Email
5	Jeel	shah	anand	Anand	vaibhav123jhh@gmail.com	2147483647		Edit Delete Email
6	Jay	patel	vadodara	vadodara	jp@123gamil.com	2147483647		Edit Delete Email
7	ketur	shah	anand	anand	ketu@12gmail.com	2147483647		Edit Delete Email
8	prince	shah	anand	anand	prince@gmail.com	2147483647		Edit Delete Email
9	Alex	patel	anand	anand	alex@gmail.com	8123451542		Edit Delete Email

15.Update Details:

UPDATE CUSTOMER DETAILS:

REGISTRATION CUSTOMER

1 CUSTOMER FIRST NAME & LAST NAME

CUSTOMER ID:

2

CUSTOMER FIRST NAME

JENISH

CUSTOMER LAST NAME

SHAH

2 CITY & ADDRESS

CITY

anand

ADDRESS

Anand

3 CUSTOMER EMAIL & PHONE

CUSTOMER EMAIL

kevin.ptl214@gmail.com

CUSTOMER PHONE

81281540139

4 CUSTOMER IMAGE

CUSTOMER IMAGE

No file chosen



☐ You agree to our Terms and Policy.

16.Invoice:

Dashboard

Manage Newspaper

Manage Category

Manage Customer

Manage subscription

POSTS(NEWS)

WEBSITE SLIDER

VIEW ORDERS

NEWS

Search...

admin

Administrator

Invoice Details

Invoice No.3

NEWSWALA CUSTOMER DETAILS:

Name

vaibhav shah

Contact no.

2147483647

Email

vaibhav1243@gmail.com

Address

vidya nagar

City

anand

Services Details

News_ID	Service	Cost
1	Times of India	RS.100
9	Marathi Logmat	RS.95
Grand Total		RS.195

17.Print Invoice:

about:blank - Google Chrome

about:blank

Invoice Details

Invoice No.3

NEWSWALA CUSTOMER DETAILS:

Name

vaibhav shah

Contact no.

2147483647

Email

vaibhav1243@gmail.com

Address

vidya nagar

City

anand

Services Details

News_ID	Service	Cost
1	Times of India	RS.100
9	Marathi Logmat	RS.95
Grand Total		RS.195

Print

1 page

Destination

Save as PDF

Pages

All

Layout

Portrait

More settings

Save

Cancel

18.Manage Slider:

Dashboard

Manage Newspaper >

Manage Category >

Manage Customer >

Manage subscription >

POSTS(NEWS) >

WEBSITE SLIDER >

VIEW ORDERS >




NEWS

Search...

admin Administrator

MANAGE SLIDER

RECENT CATEGORIES

ID	NEWS SLIDER IAMGE	ACTION
1		Edit
2		Edit
3		Edit

19.Manage Orders:

Dashboard

Manage Newspaper >

Manage Category >

Manage Customer >

Manage subscription >

POSTS(NEWS) >

WEBSITE SLIDER >

VIEW ORDERS >

NEWS

Search...

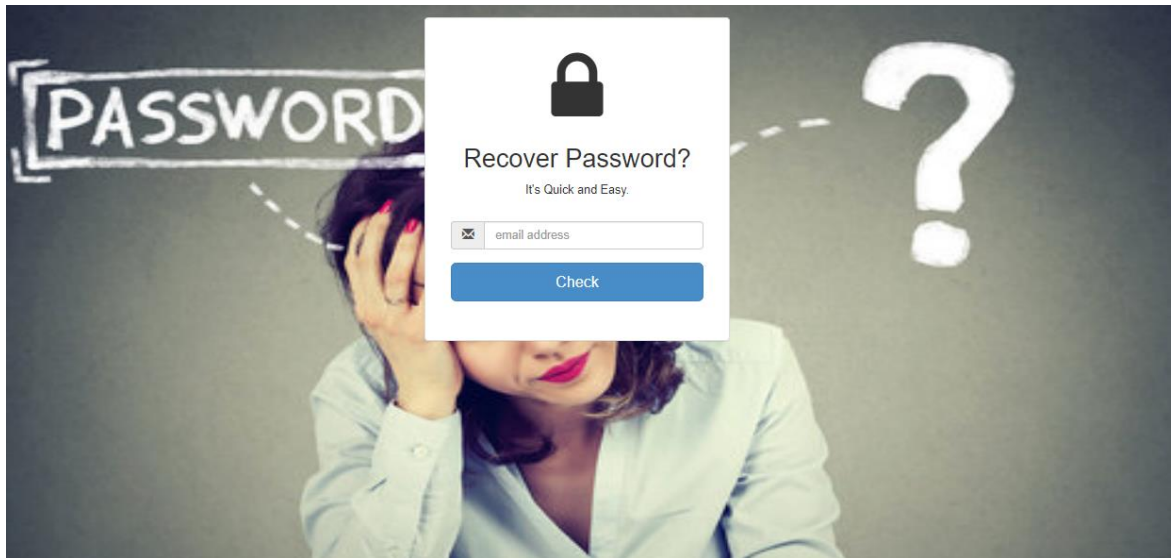
admin Administrator

MANAGE ORDER

RECENT CATEGORIES

ID	CUST ID	NEWS TYPE	NEWS PRICE	QTY	ACTION
1	0	Hindustan	125	0	Edit Delete
2	2	Times of India	100	2	Edit Delete
3	2	Dainik Bhaskar	120	1	Edit Delete
4	11	Punjabi Newspepar	95	1	Edit Delete
5	12	Dainik Bhaskar	120	0	Edit Delete
6	12	Times of India	100	0	Edit Delete
7	2	Gujarat Samchar	105	2	Edit Delete
8	2	Sandesh Hindi	104	1	Edit Delete
9	17	Times of India	100	0	Edit Delete
10	17	Marathi Logmat	95	0	Edit Delete
11	6	Times of India	100	0	Edit Delete
12	6	Hindustan	125	0	Edit Delete
13	6	Divya Bhaskar	100	0	Edit Delete

20.Admin Password Recover:



21.Login Customer:

WELCOME jenish Roy

Help My Order Logout

Order online or call us : (+91 8128135013)
06:18:12 PM
Saturday, 18 March 2023

NEWSWALA

Search for a Product...

HOME HOW IT'S WORKS NEWSPEPERS ONLINE NEWS PAYMENTS ABOUT US CONTACTS US

hindustantimes.com

NEW DELHI METRO
Monday, August 31, 2020

Hindustan Times
FIRST VOICE. LAST WORD.

India first to hit 80k cases in single day

Vaccine diplomacy in India's outreach plan



RANDAN BILEKANI | EX-UPA CHAIRMAN

India is uniquely placed to offer vaccination for the entire population and the experience

22.Add to Cart:

[Home](#) / [CheckOut](#)


YOUR SHOPPING BAG CONTAINS: 2 PRODUCTS


SL No.	Product	Product Name	Unit Price	Remove
1		Dainik Bhaskar	120 /-	x
2		Gujarat Samchar	105 /-	x


Total Amount: 225 /-

[Continue Shopping](#)
[Confirm Order](#)

CONTACT

 1234k Avenue, 4th block,
Vadodara

 Newswalas29@gmail.com

 +91 8128135013

INFORMATION





[About Us](#)
[Contact Us](#)

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[Create Account](#)

23.My Order:

YOUR ORDERS: 4 PRODUCTS

SL No.	Order ID	Product Name	Product Image	Quantity	Unit Price	Order Status
1	1679143145	Times of India		1	100 /-	Pending
2	1679143145	Dainik Bhaskar		1	120 /-	Pending
3	1679143145	Gujarat Samchar		1	105 /-	Pending
4	1679143145	Sandesh Hindi		1	104 /-	Pending

Total Amount: 429 /-

[BACK](#)
[PAYMENT](#)

24.Payment:

Razorpay Payment

Payee Name:

Jenish Roy

Amount:

429

Item Description:

PAYMENT

Pay

Razorpay Payment

Payee Name:
Jenish Roy

Amount:
429

Item Description:
PAYMENT

Pay

NEWSWALA.com

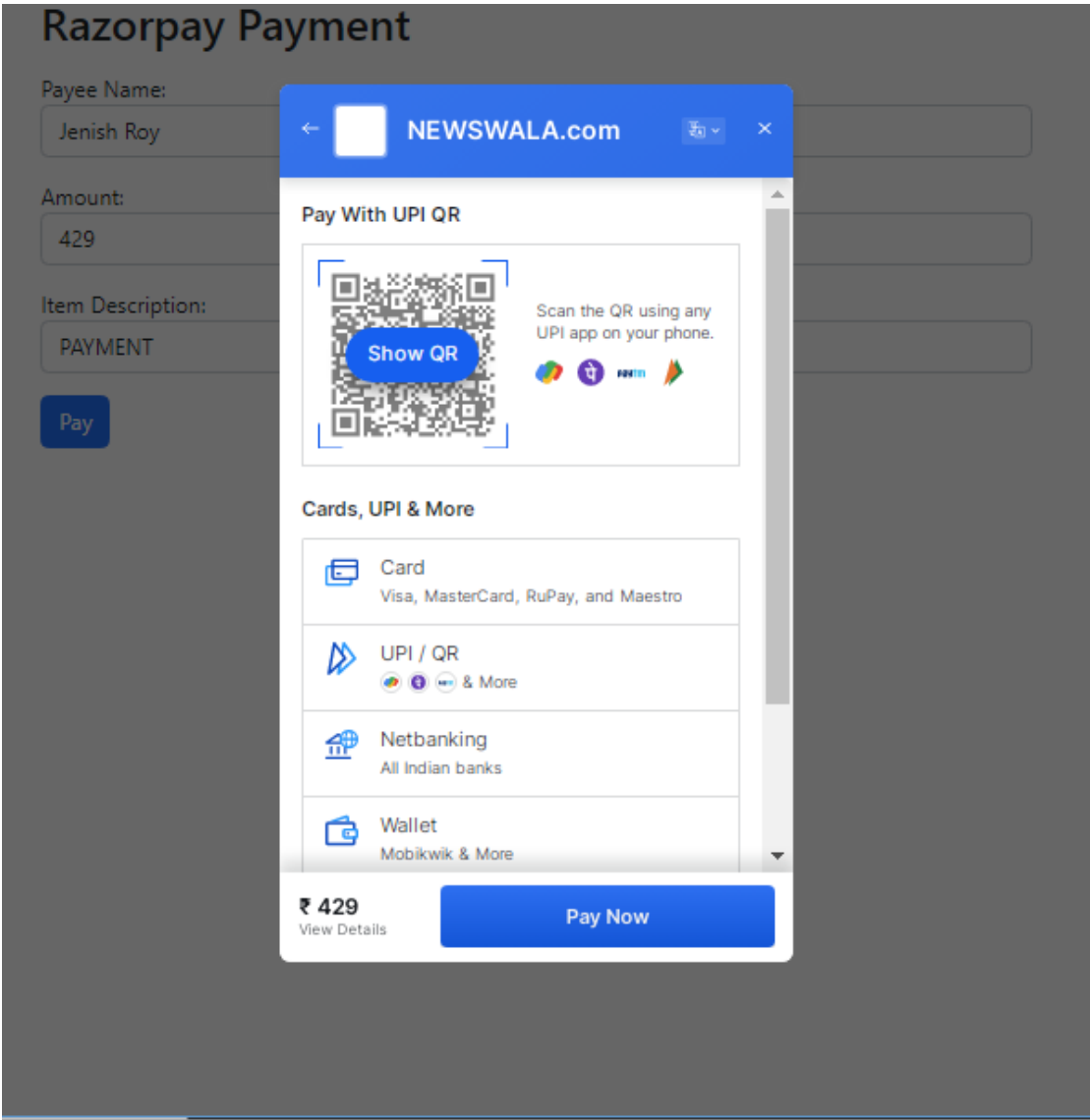
Total Amount
₹ 429

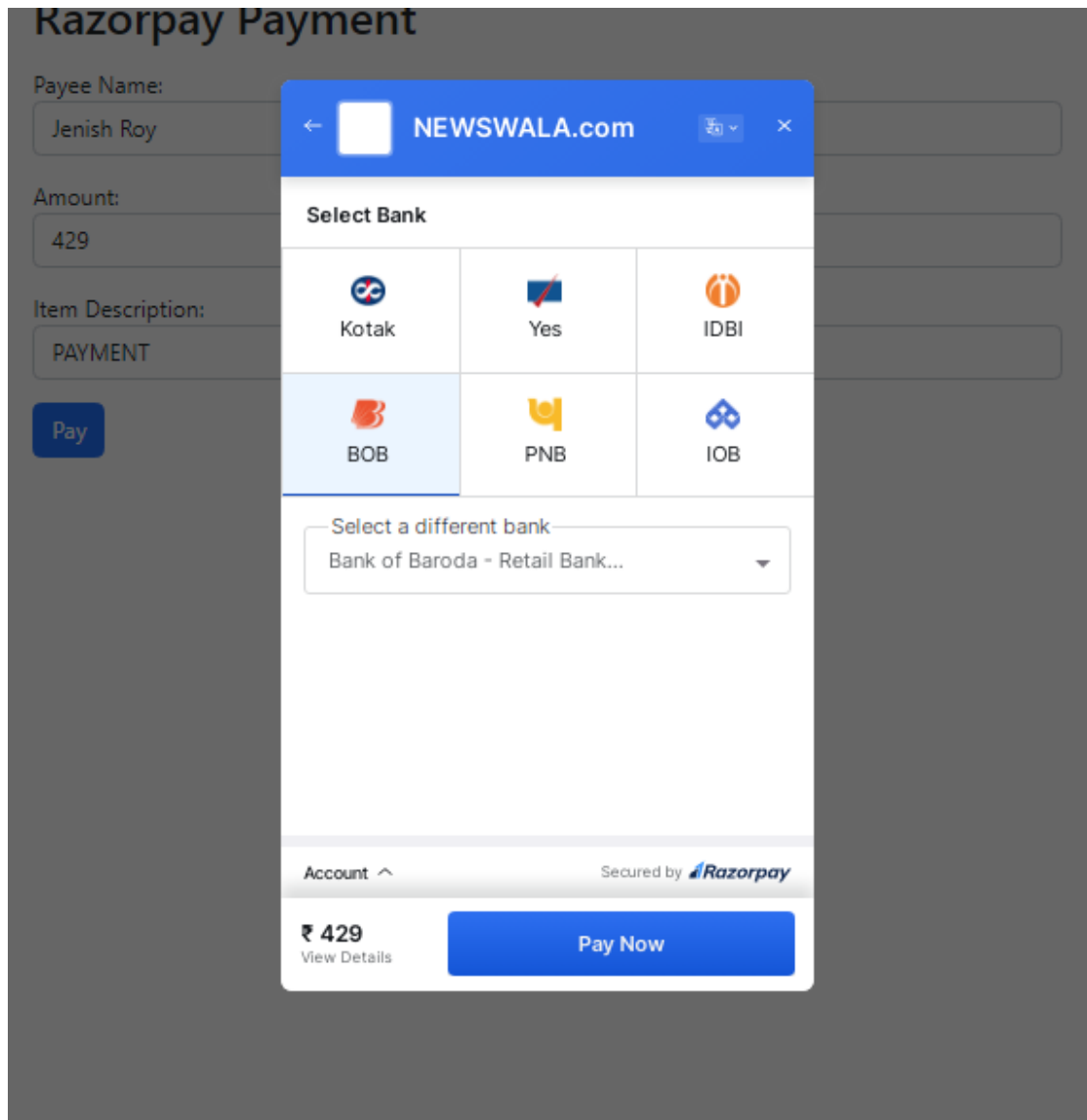
Secured by Razorpay

Contact Details

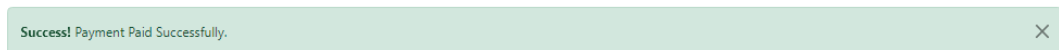
Phone Number
+91 8128135013

Proceed





25.Payment success:



26.Work Flow:



27.About US:

ABOUT US

Newspapers in India are like a commodity. Even in this digital era, 650 Million People read it every morning along with their cup of tea.

Your newspaper begins within one week of the time you place the order. Your order information is kept safe, and we value your privacy. You will be receiving your newspaper from the same regular vendor at the same time.

We provide consumers with the best deals and low prices on newspaper delivery from a wide variety of titles. We have a direct relationship with every Newspaper Company ensuring prompt and reliable service with many benefits.

The system should be as smooth as you can now order your shoes, groceries or even plumber nowadays! And yes we know how messy your place gets when the papers you read stockpile. And then you need to synchronize your routine with the raddiwala's scream outside.

Newspapers



CONTACT

1234x Avenue, 4th block,
Vadodara
Newsalaz3@gmail.com

INFORMATION

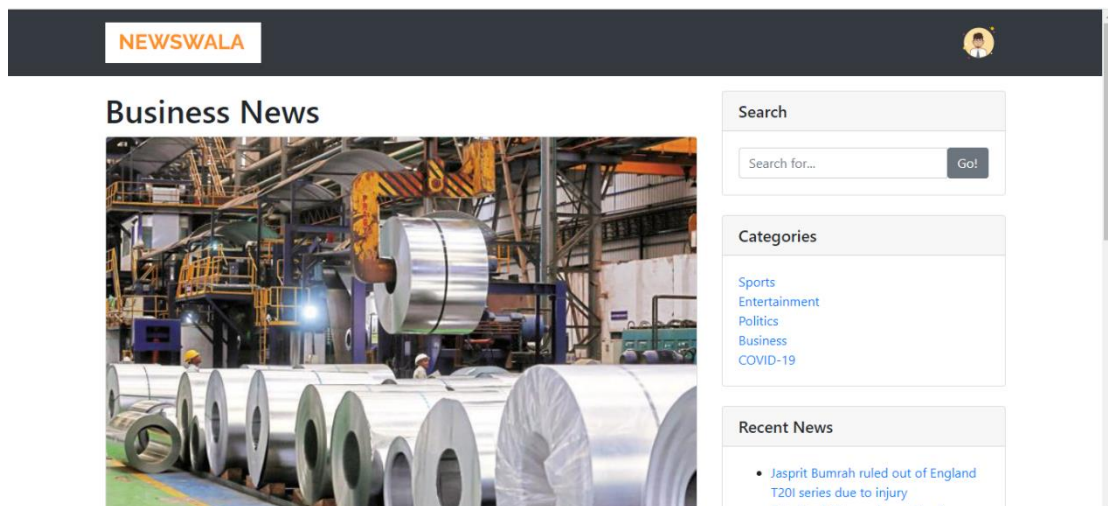
[About Us](#)
[Contact Us](#)

PROFILE

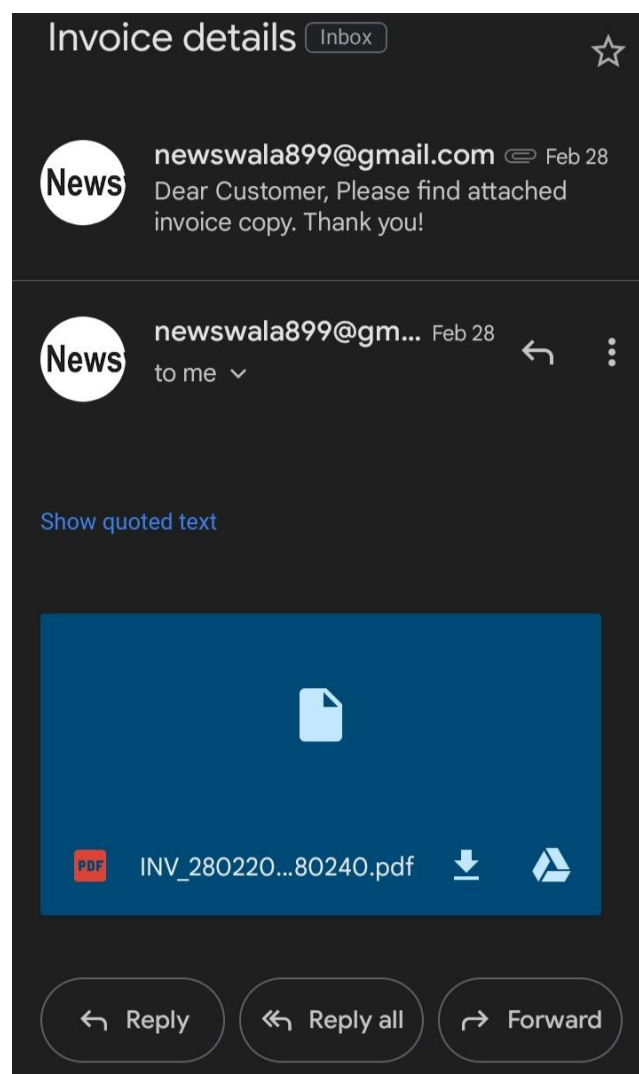
[Login](#)
[Create Account](#)



28.Online News:



29.INVOICE PDF send in to customer though the register Email ID:



30.PDF:

CHPWEB TECHNOLOGIES CONTACT: +91 8128135013 WEB SITE: WWW.NEWSWALA.COM		
CUSTOMER NAME: JENISH SHAH MOB.NO: 81281540139		BILL DT.: 27-02-2023 BILL NO.: 2
INVOICE		
TYPE OF NEWS PAPER \$		AMOUNT
Dainik Bhaskar		120
Write any remarks		
Gujarat Samchar		105
Write any remarks		
Hindustan		125
Write any remarks		
Divya Bhaskar		100
Write any remarks		
Punjab Newspepar		95
Write any remarks		
		GRAND TOTAL: 545
		PAYMENT MODE: CASH/ONLINE
THANK YOU ! VISIT AGAIN		

31.Multi-Language supports:



32.About us :

🏠 ઘર / અમારા વિશે

અમારા વિશે

ભારતમાં અખબારો એક કોમોડિટી જેવા છે. આ ડિજિટલ યુગમાં પણ, 650 મિલિયન લોકો દરરોજ સવારે તેમના ચાના કપ સાથે તેને વાંચે છે.

તમારું અખબાર તમે ખરીદી કરી તેના એક અઠવાડિયાનો આઠ સરુ થઈ જાય છે. તમારી ખરીદીની માહિતી સુરક્ષિત રાખવામાં આવે છે. અને અને તમારી વૈભવીકરણને મદદ આપીએ છીએ. તમે તમારા અખબારને તે જ સમયે તે જ નિયમિત વિક્રેતા પાસેથી પામી શકો છો.

અને ક્રાંતિકોને અખબારના ટિલિવિડી પર વિવિધ પ્રકારના શોર્ટફોર્મો જેવા ટીઆ અને એડી ટિમનો પ્રદાન કરીએ છીએ. અમારી ટીક અખબાર કામની સાથે સોયે સંબંધ છે જે સજા વાળી સાથે તાત્કાલિક અને વિશ્વસનીય સેવાની ખાતરી આપે છે.

તે સિવાય એટલી સરળ હોવી જોઈએ કે તમે કવે તમારા જૂતા, કચિયાણા અથવા તો આંજીર પાચ્યર ખરીદી કરી શકો છો અને હા અને જાણીએ છીએ કે જ્યારે તમે પેપર વાંચી છો ત્યારે તમારી જગ્યા કેટલી અવ્યવસ્થિત થઈ જાય છે. અને પછી તમારે તમારી કિંમતચર્ચા બહાર રહીવાવાની વીડી સાથે સુમેળ કરવાની જરૂર છે.

અખબારો

સંપર્ક કરો	માહિતી	પ્રોફાઇલ
<p>📍 12345, એડ્રેસ, તમે જાણો</p> <p>✉️ News@news123@gmail.com</p> <p>☎️ +91 8128135013</p>	<p>➡ અમારા વિશે</p> <p>➡ અમારો સંપર્ક કરો</p>	<p>➡ પ્રવેશ કરો</p> <p>➡ ખાતું બનાવો</p>

© 2023 સમાચારવાલા. સર્વાધિકાર સુરક્ષિત | ન્યૂઝવાલા દ્વારા ડિઝાઇન

📱 🌐 📧 📞

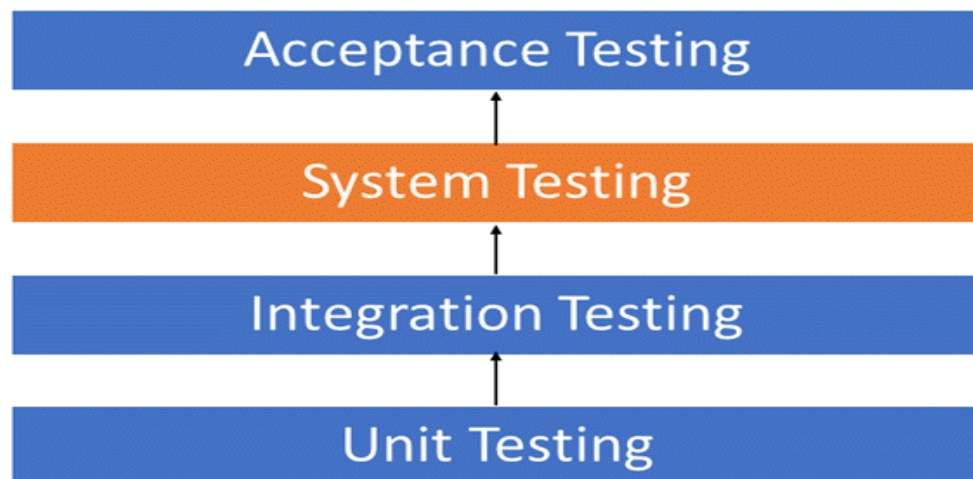
VISA Mastercard

7. System Testing

7. System Testing:

SYSTEM TESTING is a level of software testing where a complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements.

System Testing is the testing of a complete and fully integrated software product. Usually, software is only one element of a larger computer-based system. Ultimately, software is interfaced with other software/hardware systems. System Testing is actually a series of different tests whose sole purpose is to exercise the full computer-based system.



As with almost any software engineering process, software testing has a prescribed order in which things should be done. The following is a list of software testing categories arranged in chronological order. These are the steps taken to fully test new software in preparation for marketing it:

- **Unit testing** - testing performed on each module or block of code during development Unit testing is normally done by the programmer who writes the code.
- **Integration testing** - testing done before, during and after integration of a new module into the main software package. This involves testing of each individual code module. One piece of software can contain several modules which are often

created by several different programmers. It is crucial to test each module's effect on the entire program model.

- **System testing** - testing done by a professional testing agent on the completed software product before it is introduced to the market.
- **Acceptance testing** - beta testing of the product done by the actual end users

Different Types of System Testing

Below we have listed types of system testing a large software development company would typically use

- **Usability Testing** - Usability Testing mainly focuses on the user's ease to use the application, flexibility in handling controls and ability of the system to meet its objectives
- **Load Testing** - Load Testing is necessary to know that a software solution will perform under real-life loads.
- **Regression Testing** - Regression Testing involves testing done to make sure none of the changes made over the course of the development process have caused new bugs. It also makes sure no old bugs appear from the addition of new software modules over time.
- **Recovery Testing** - Recovery testing is done to demonstrate a software solution is reliable, trustworthy and can successfully recoup from possible crashes.
- **Migration Testing** - Migration testing is done to ensure that the software can be moved from older system infrastructures to current system infrastructures without any issues.
- **Functional Testing** - Also known as functional completeness testing, Functional Testing involves trying to think of any possible missing functions. Testers might make a list of additional functionalities that a product could have to improve it during functional testing.
- **Hardware/Software Testing** - IBM refers to Hardware/Software testing as "HW/SW Testing". This is when the tester focuses his/her attention on the interactions between the hardware and software during system testing.

What Types of System Testing Should Testers Use?

The specific types used by a tester depend on several variables. Those variables include:

- **Who the tester works for** - This is a major factor in determining the types of system testing a tester will use? Methods used by large companies are different than that used by medium and small companies.
- **Time available for testing** - Ultimately, all 50 testing types could be used. Time is often what limits us to using only the types that are most relevant for the software project.
- **Resources available to the tester** - Of course some testers will not have the necessary resources to conduct a testing type. For example, if you are a tester working for a large software development firm, you are likely to have expensive automated testing software not available to others.
- **Software Tester's Education** - There is a certain learning curve for each type of software testing available. To use some of the software involved, a tester has to learn how to use it.
- **Testing Budget** - Money becomes a factor not just for smaller companies and individual software developers but large companies as well.

8. Limitations

8.0 Limitations:

Our website is used for normal user but there are some limitations of our site, and we will try to release it in future.

- Less security provided, and there are possibilities of frauds.
- Less sophisticated methods used.
- Difficulty in maintain of customer data and records.
- Our site can be limited addition newspaper distribution.
- The payment can't be refundable.
- Online newspaper can't deliver.

9.Future Enhancement

9.0 Future Enhancement:

- In future we have provide online delivery of newspaper.
- Online implementation can be done.
- Introduction of messages and emailing can be added, which may send the attendance details to the students, or more probably their parents. This feature may help in maintaining a good attendance

10. Conclusion

10. Conclusions:

Thus, NEWSWALA website is reviewed based on the various object-oriented features, advantages, and disadvantages, etc. and also stated the possible future enhancement. Our website provides more benefits to smaller newspaper distributor and we will try to give them more benefits in future.

11. Bibliography

11. Bibliography:

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