MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Final Year Internship Report

On

Online Novel Reading System

From

Infosys Private Limited

Submitted By:

Ojashwini Bhargava

0901CS181064

Faculty Mentor:

Prof. R.K Gupta

Professor, Department of CSE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Online Novel Reading System

A final year internship report submitted in partial fulfilment of the requirement for the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

Ojashwini Bhargava

0901CS181064

Internship Faculty Mentor:

Prof R.K Gupta

Professor, Department of CSE

Submitted to:

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

Internship Certificate Received

from

Infosys Private Limited, Mysore

Infosys | Education, Training and Assessment

CERTIFICATE OF COMPLETION
OF
INTERNSHIP

This is to certify that

Ojashwini Bhargava

of

Madhav Institute of Technology and Science, Gwalior, RGPV Bhopal

has completed the internship program at Infosys Limited

from

January 2022 – April 2022

Satheesha B N

Satheesha B Nanjappa
Vice President and Head, Global Education Center

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

CERTIFICATE

This is certified that **Ojashwini Bhargava 0901CS181064** has submitted the Internship report titled "**Online Novel Reading System**" of the work she has done under the mentorship of **Prof. R.K Gupta**, in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

26/5/22

Prof R.K Gupta
Faculty Mentor
Computer Science & Engineering

26/05/2022

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Professor & Head
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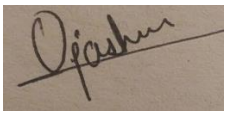
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

DECLARATION

I hereby declare that the work being presented in this Internship report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in CSE at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Prof R.K Gupta,** professor, Department of CSE.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



Ojashwini Bhargava

0901CS181064

IV Year

Computer Science & Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

ACKNOWLEDGEMENT

The full semester internship has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary/interdisciplinary internship as a curriculum requirement, under the provisions of the Flexible Curriculum Scheme (based on the AICTE Model Curriculum 2018), approved by the Academic Council of the institute. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering, for allowing** me to explore this internship. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty mentors. I am grateful to the guidance of **Prof R.K Gupta**, professor Department of Computer Science and Engineering, for his continued support and close mentoring throughout the internship. I am also very thankful to the faculty and staff of the department.

Ojashwini Bhargava
0901CS181064
IV Year
Computer Science & Engineering

ABSTRACT

This project report describes our work for the development of “Novel’s Point”, an enterprise application. An Enterprise Application is a software application that helps enterprises in managing their business-related activities. They are large and complex and solve business-related problems to fulfill the needs of the enterprises. The existing system is well and good also, but as we know the habit of novel reading is decreasing day by day. So we have to attract user to come back on the track or habit of novel reading. They had some less features, so we want to provide the best option in the website. As the title suggests this is a online website which provide the novels, that can be read online on this website. The objective of our project is to provide a better user platform to user or the people who love to read novel. We surely provide some basic functionalities as well as more good option in this to improve the experience of user. We are creating a platform the reader who are interested in the novels, but to give them feasibility of reading anywhere and to have a portable option of reading novel.

सार:

यह परियोजना रिपोर्ट एक उद्यम अनुप्रयोग "नोवेल्स पॉइंट" के विकास के लिए हमारे काम का वर्णन करती है। एंटरप्राइज एप्लिकेशन एक सॉफ्टवेयर एप्लिकेशन है जो उद्यमों को उनके व्यवसाय से संबंधित गतिविधियों के प्रबंधन में मदद करता है। वे बड़े और जटिल हैं और उद्यमों की जरूरतों को पूरा करने के लिए व्यवसाय से संबंधित समस्याओं को हल करते हैं। मौजूदा व्यवस्था अच्छी है और अच्छी भी है, लेकिन जैसा कि हम जानते हैं कि उपन्यास पढ़ने की आदत दिन-ब-दिन कम होती जा रही है। इसलिए हमें ट्रैक पर वापस आने या उपन्यास पढ़ने की आदत के लिए उपयोगकर्ता को आकर्षित करना होगा। उनके पास कुछ कम विशेषताएं थीं, इसलिए हम वेबसाइट में सबसे अच्छा विकल्प प्रदान करना चाहते हैं। जैसा कि शीर्षक से पता चलता है कि यह एक ऑनलाइन वेबसाइट है जो उपन्यास प्रदान करती है, जिसे इस वेबसाइट पर ऑनलाइन पढ़ा जा सकता है। हमारी परियोजना का उद्देश्य उपयोगकर्ता या उपन्यास पढ़ना पसंद करने वाले लोगों को एक बेहतर उपयोगकर्ता मंच प्रदान करना है। हम निश्चित रूप से उपयोगकर्ता के अनुभव को बेहतर बनाने के लिए इसमें कुछ बुनियादी कार्यक्षमताओं के साथ-साथ अधिक अच्छे विकल्प प्रदान करते हैं। हम पाठकों के लिए एक ऐसा मंच तैयार कर रहे हैं जो उपन्यासों में रुचि रखते हैं, लेकिन उन्हें कहीं भी पढ़ने की व्यवहार्यता देने के लिए और उपन्यास पढ़ने का एक पोर्टेबल विकल्प रखने के लिए।

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Introduction

1.1 Objective

As the title suggests this is a online website which provide the novels, that can be read online on this website.
The objective of our project is to provide a better user platform to user or the people who love to read novel. We surely provide some basic functionalities as well as more good option in this to improve the experience of user.

1.2 Scope

Scope of the project is very vast. We can build an android app, so the user can easily access the novels in phone through app. We can purchase books online also in app and website as well in the future. We can add audio books as well to increase the scope of our website. We can give the option of community so the same kind of people can come in contact and have communication.

1.3 Problems in existing system

The existing system is well and good also, but as we know the habit of novel reading is decreasing day by day. So we have to attract user to come back on the track or habit of novel reading. They had some less features, so we want to provide the best option in the website.

1.4 About this Website

We are creating a platform the reader who are interested in the novels, but to give them feasibility of reading anywhere and to have a portable option of reading novel. A single device is enough to read any number of books you want. It allows the user to store plenty of books on the device, way more than anyone can read in their lifetime.

Chapter 2

Literature Survey

2.1 Online Novel Reading System

Internet is a great treasure trove of eBooks based websites and literacy games. Most learners these days seem to empower themselves with an eBook. Books when read online are much more interactive than their physical counterparts leading to higher comprehension rates. These eBooks come with a large range of multimedia tools which further increase the attractiveness of such books amongst young readers. Obtaining mastery in any language through speak along routines has proved to be extremely effective.

1. One Device, Many Books: Books are portable and lightweight, making it easy to carry around. Instead of carrying multiple bulky books, one Book reader can hold thousands of Books. It saves a lot of space- in your home and in your bag. One dose not have to worry about the storage limit.

A single device is enough to read any number of books you want. It allows the user to store plenty of books on the device, way more than anyone can read in theirlifetime.

2. Accessible Everywhere: Novel can be downloaded and stored for later use. One can carry the Book around and read them whenever they want. Students and employees can go through the learning material while at home and even while travelling. It is convenient for people on the go. Some Readers come with the option of offline accessibility, allowing people to use it even in the absence of an internet connection.

Unlike printed books which have to be ordered or purchased from the bookstore, with time lost in waiting for delivery or travelling to the bookstore; readers can easily access any Novels anytime and anywhere.

3. Easily Updates: The contents on the link are mostly cloud-based, meaning it can be updated any time. Authors and publishers can always add the up-to-date information, providing users with the latest digital content. This saves reprinting costs and the time involved in the process.

4. Shareable Content: You can share the novels link contents with multiple users. The social feature on the link allows sharing and liking of content, which is not possible with printed books. You might share a printed book with one person at a time, but an novels can be shared with many people at once. Students and employees can use this feature to collaborate with their peers.

5. Easy on the Eyes: EReaders these days come with features where you can adjust the brightness of the screen according to the time of the day and depending upon your preferences. Many EReaders even have read in the dark feature, with lights that won't strain your eyes, and neither would they disturb others around you. Users can even change the fonts of the text. They can increase or decrease the size of the font.

6. Easy on the Eyes: EReaders these days come with features where you can adjust the brightness of the screen according to the time of the day and depending upon your preferences. Many EReaders even have read in the dark feature, with lights that won't strain your eyes, and neither would they disturb others around you. Users can even change the fonts of the text. They can increase or decrease the size of the font. Basically, EBooks ensure that your eyes are taken care of.

Chapter 3

System Requirement

3.1 Information Gathering

We have gathered such a lot of information from our side. We have checked existing website and there features. The first and foremost method for gathering and managing our project information was to organizing team meetings. By conducting consistent weekly internal meetings with your project team, makes this simpler.

3.2 System Feasibility

Feasibility study of the system is a very important state during system design. Feasibility study is a test of a system proposal according to its workability impact on the organization, ability to meet user needs, and use of resources. Feasibility study decides whether the system is properly developed or not.

3.2.1 Software Implementation language/technology

For Front-end

The Technologies are

1. Angular: Angular (commonly referred to as "Angular 2+" or "Angular CLI") is a TypeScript-based free and open-source web application framework led by the Angular Team at Google and by a community of individuals and corporations. Angular is a complete rewrite from the same team that built AngularJS. Angular is used as the frontend of the MEAN stack, consisting of MongoDB database, Express.js is a web application server framework.

2. Typescript: Typescript lets you write JavaScript the way you really want to. Typescript is a typed superset of JavaScript that compiles to plain JavaScript. Type- Script is pure object oriented with classes, interfaces and statically typed like C or Java. The popular JavaScript framework Angular 2.0 is written in TypeScript. Mastering Typescript can help programmers to write object-oriented programs and have them compiled to JavaScript, both on server side and client side.

3. HTML: Hypertext Mark-up Language (HTML) is the standard mark-up language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

4. CSS: Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and customer interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media.

5. Bootstrap: Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

For Back-end

The Technologies are

1. Spring Boot: Spring Boot makes it easy to create stand-alone, production- grade spring based Applications that you can "just run". We take an opinionated view of the spring platform and third-party libraries so you can get started with minimum fuss. Most Spring Boot applications need minimal Spring configuration.

2. Java: Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general-purpose programming language intended to let programmers write once, run anywhere (WORA), meaning that compiled Java code can run on all platformsthat support Java without the need to recompile. Java applications are typically com- piled to bytecode that can run on any Java virtual machine (JVM) regardless of the underlying computer architecture. The syntax of

3. MySQL: MySQL is an open-source relational database management system (RDBMS). MySQL is a central component of the LAMP open-source web application software stack (and other "AMP" stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python". Applications that use the MySQL database include: TYPO3, MODx, Joomla, Word Press, Simple Machines Forum, phpBB, MyBB, and Drupal.

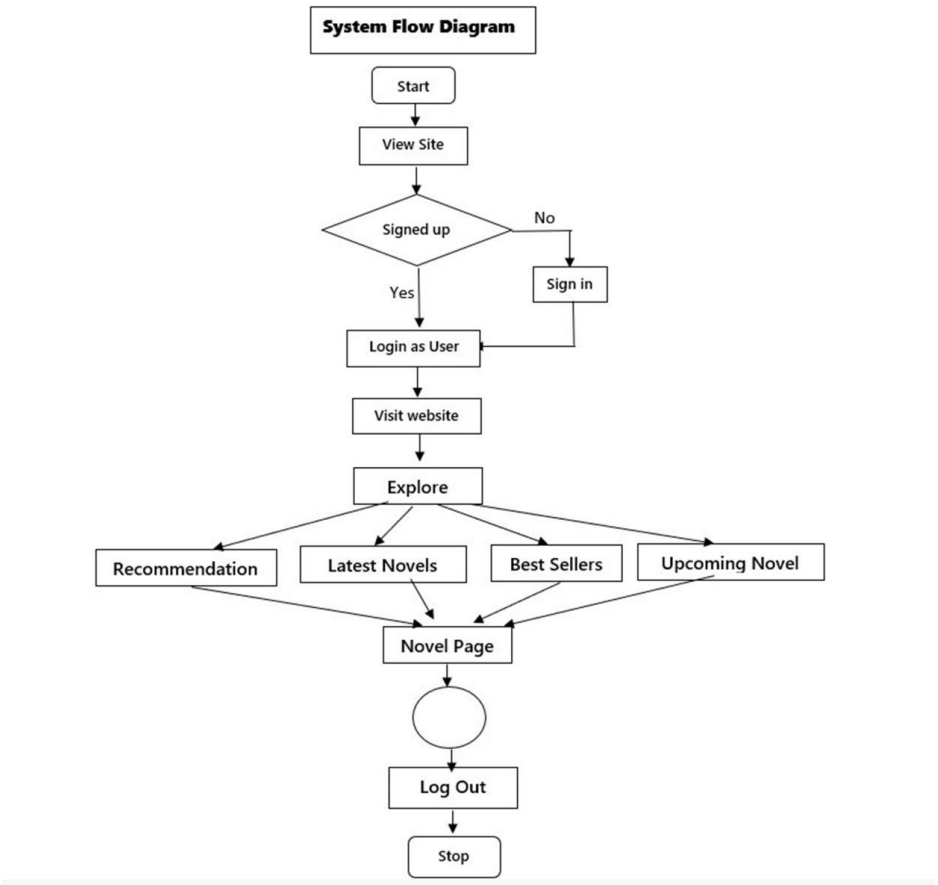
Chapter 4

System Analysis

4.1 Information Flow Representation

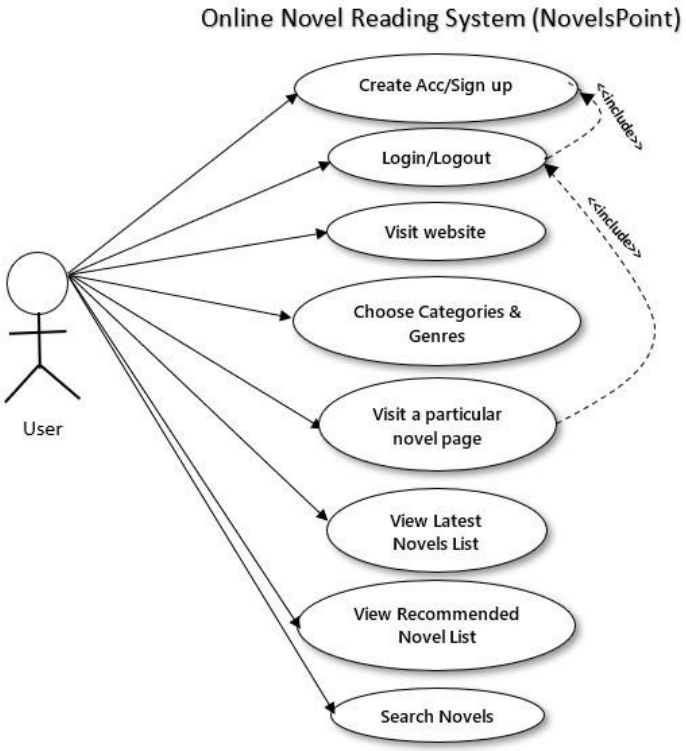
4.1.1 UML System Flow

Flow diagram is a collective term for a diagram representing a flow or set of dynamic relationships in a system. The term flow diagram is also used as synonym of the flowchart, and sometimes as counterpart of the flowchart. System Flow Diagram is basically a graphical and sequential representation of the major steps involved in a systematic process. A SFD (System Flow Diagram) shows what kind of information will be input to and output from the system, where the data will come from and goto, and where the data will be stored.



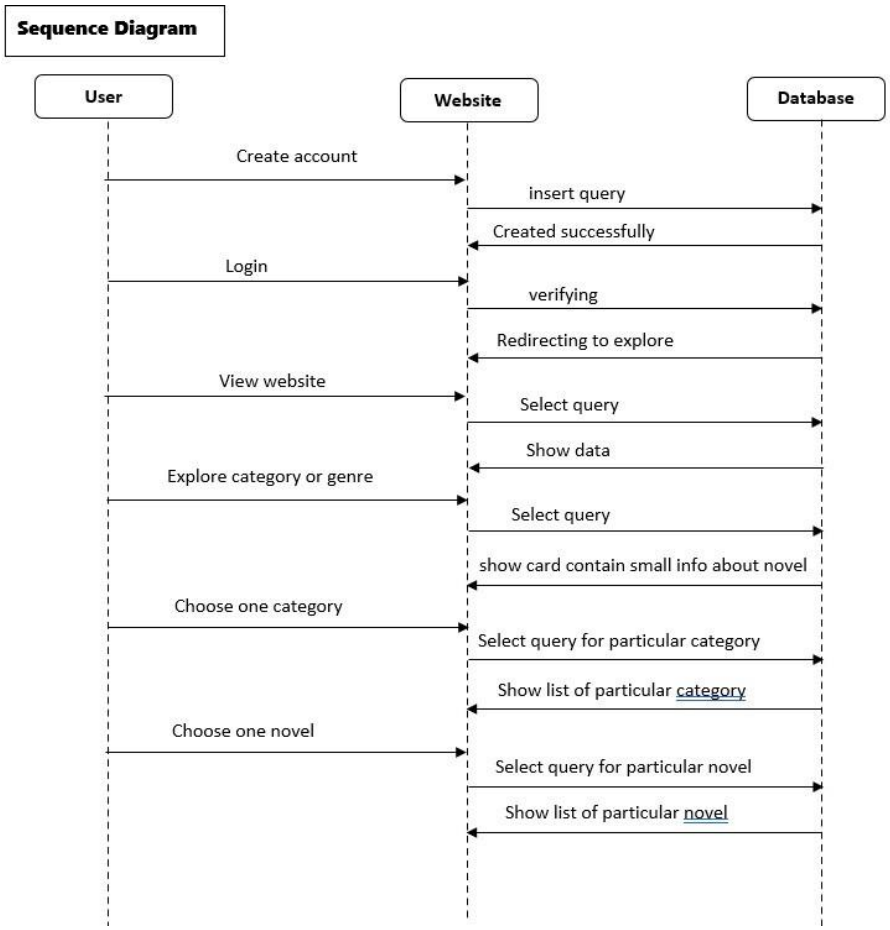
4.1.2 UML Use Case Diagram

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



4.1.3 UML Sequence Diagram

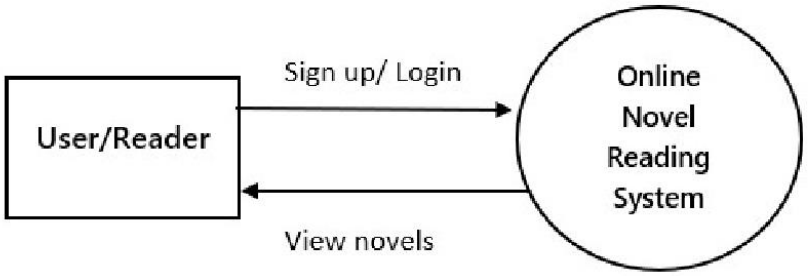
A sequence diagram simply depicts interaction between objects in a sequential order
i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram. Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.



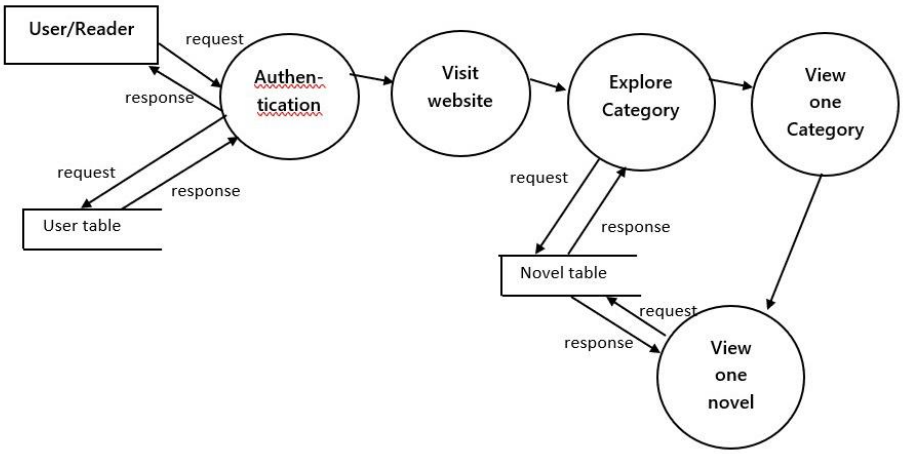
4.1.4 Data Flow Diagram

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both. It shows how data enters and leaves the system, what changes the information, and where data is stored. The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system.

0 LEVEL DFD



1 LEVEL DFD



Chapter 5

System Design

5.1 Architectural Design

Describe Architectural design for your project. The software needs the architectural design to represents the design of software. IEEE defines architectural design as "the process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system." The software that is built for computer-based systems can exhibit one of these many architectural styles.

5.2 Modules used

Describe various modules / procedures of your project specific system.

Main modules of project are:

- **Sign up:** - In this user can sign up and can able to feed details in the database like username, email, and password.
- **Login:** - From this user can login in website by username and password at any time to avail more features of website.
- **Explore:** - This is the page where user will get redirected after login. Herehe will see the cards that contain some short information about the particular novel. Here by clicking the read more button on the particular novel card. He will get redirected to particular novel page.
- **Recommendation:** - This is the page where all recommended novels will show in the form of list.
- **Latest Novels:** - This is the page where all latest novels will show in the formof list.
- **Best Seller:** - This is the page where all best seller novels will show in the form of list.
- **Novel Page**: - This is the page where we can see all the details about a particular novel.

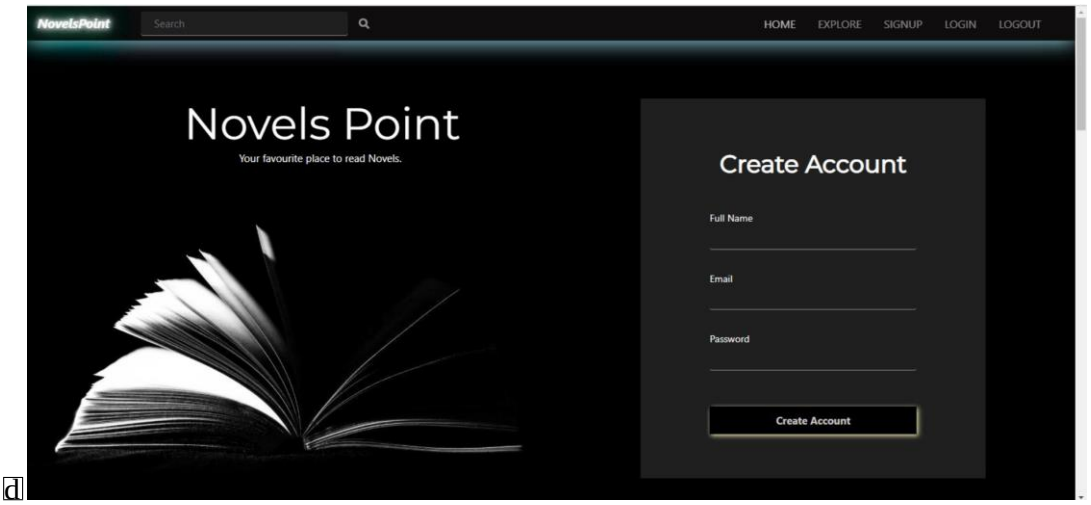
5.2.1 Internal Data Structures

Array list: Array List class uses a dynamic array for storing the elements. It is like an array, but there is no size limit. We can add or remove elements anytime. So, it is much more flexible than the traditional array. It is found in the java.util package. It is like the Vector in C++. The Array List in Java can have the duplicate elements also. It implements the List interface so we can use all the methods of the List interface here. The Array List maintains the insertion order internally

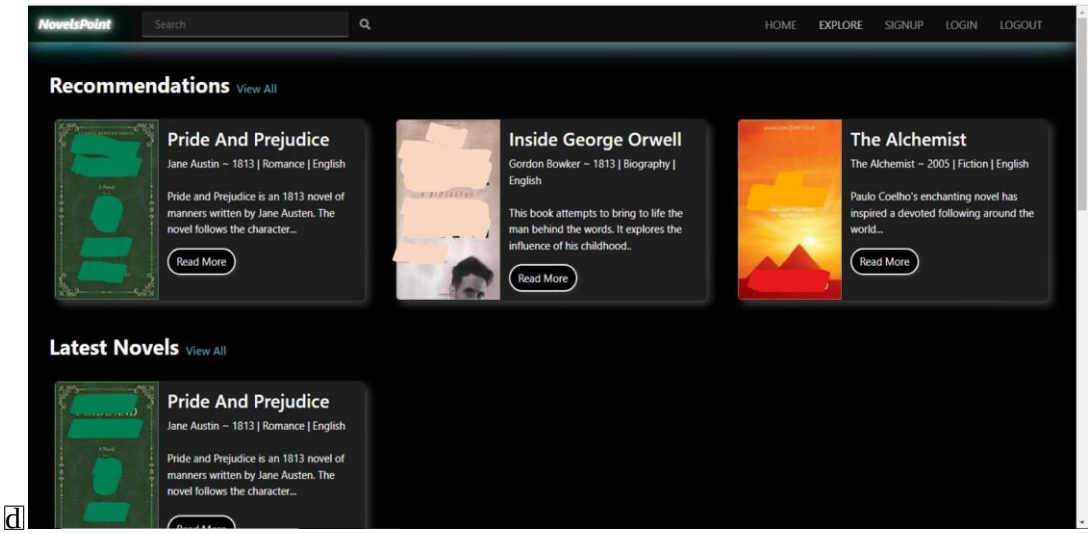
5.3 Interface Design

User Interface in our project:

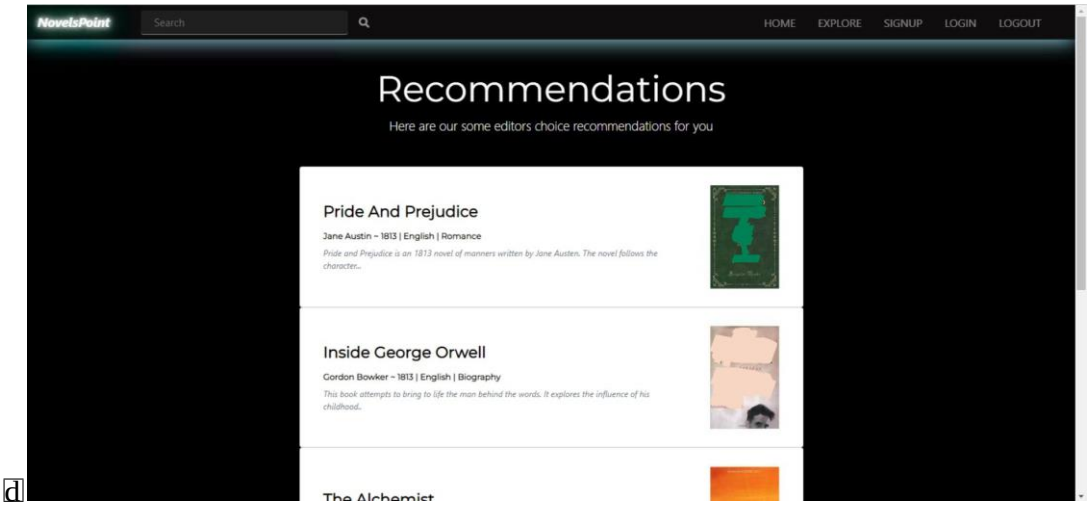
- **Home**: Home is the main page which contain sign up from and some images.



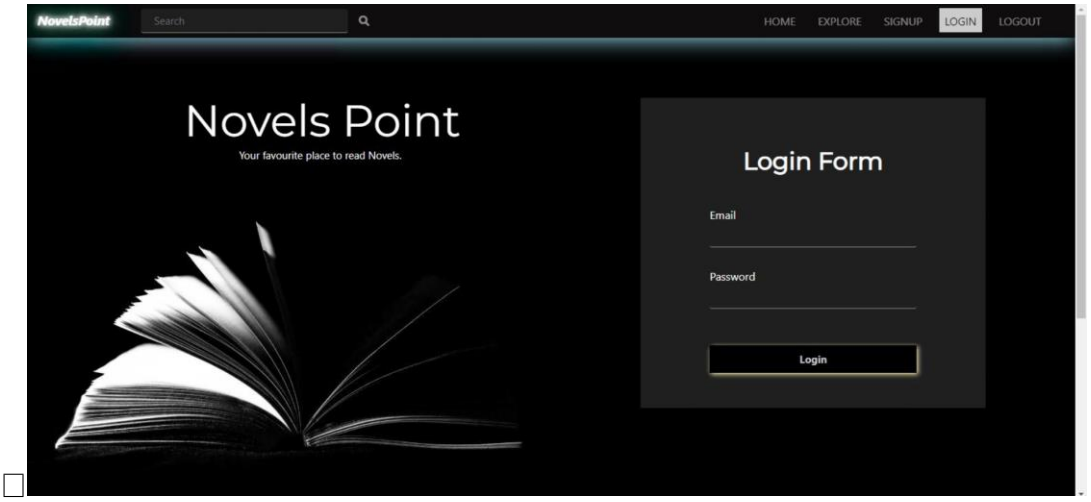
- **Explore:** Explore is the page where user can see a lot of cards contain information of novel and short description.



- **<u>One chosen Category as Recommendation:</u>** It's the page where we can see thelist of all recommended novel.



- **<u>Login:</u>** Login is page from where user can login in the website.



- **Novel Page :** It’s the page where it contain the information about a particularnovels like published year. Author name, language, page

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Chapter 6

IMPLEMENTATION & TESTING

6.1 Implementation

Recommended System Requirements:

- A good CPU and a GPU with at least 8GB memory.
- At least 8GB of RAM.
- Active internet connection so that the system can access the online resources through links.

Recommended Software Requirements:

- Eclipse IDE
- Visual Studio Code
- Postman-win64 - 7.26.1

Required Libraries for this project along with their version numbers used while making and testing of this project:

- Angular CLI - 13.2.5
- Node - 16.14.0
- Package Manager - npm 8.3.1
- OS – win32 x64
- Typescript – 4.5.5
- rxjs – 6.6.6
- apache-maven-3.3
- **Procedure to configure Eclipse for Backend**

1. Set the following environment Path variables:
   - ✓ C:\Program Files\Zulu\zulu-11\bin\
   - ✓ %AppData%\npm
   - ✓ C:\Java_Artifacts\Maven\apache-maven-3.3.9\bin\
2. Open Eclipse > click on windows > preferences > java > installed JRE's > add > Standard VM > set directory – C:\Program Files\Zulu\zulu-11\bin\ > finish > apply and close.
3. Open C drive > java artifacts > maven > copy settings and paste it in C:\Users\(your username)\.m2\(paste settings inside .m2 folder).
4. Clone repository to preserve directory structure:
   - ➢ Go to File dropdown in the navigation bar.
   - ➢ Click on import…
   - ➢ Under Git folder, select – Projects from Git (with smart import) and click on next.
   - ➢ Select Clone URI and click on next.
   - ➢ Copy the web URL of your backend repository from Code dropdown of GitHub () and paste it in the URI field in Eclipse import projects from Git dialog box. And click on next.
   - ➢ Select branches to clone from remote repository and click on next.
   - ➢ Select the initial branch which will be considered as origin and click on next.
   - ➢ Click on Finish.
5. Once the repository is cloned successfully in the Eclipse, right click on project > build path > configure build path/select classpath > add library > JRE System Library > click on finish/apply & close.
6. Right click on project > maven project/update project... > select force update of snapshots > releases/ok.

- **Procedure to execute the Backend :**

1. Open command prompt > type mysql – console.
2. Open another command prompt > type mysql -u root > copy the Table Script > press enter.
3. Right click on novespointapplication.java file > Run As > Java Application.

- **Procedure to configure Visual Studio Code for Frontend**

1. Set the following environment Path variables:
   - ✓ C:\Program Files\nodejs\
   - ✓ C:\Program Files\Git\bin\
2. Clone repository to preserve directory structure:
   - ➢ Go to View dropdown in the navigation bar.
   - ➢ Click on Command Palette…
   - ➢ Search and select Git: Clone option below the text box.
   - ➢ Copy the web URL of your frontend repository from Code dropdown of GitHub () and paste it in the text box in Vscode and press Enter.
   - ➢ Select .git folder in C:\Users\(your username)\ directory and click on open folder.
3. Once the repository is cloned successfully in the Vscode, go to View dropdown in the navigation bar and click on Terminal.
4. Execute the following commands in the opened Terminal:
   1. npm install –g @angular/cli@13.2.5
   2. npm install
   3. ng v

- **Procedure to execute the Frontend :**

1. Go to View dropdown in the navigation bar and click on Terminal.
2. Execute the following command in the opened Terminal: ng serve –open

NOTE: Execute the backend before executing the frontend. Both frontend and backend should be working simultaneously for the proper smooth successful working of the Website.

6.1.1 Tools used

Tools for project -

1. Eclipse: Eclipse is an integrated development environment used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment. It is the second-most-popular IDE for Java development, and, until 2016, was the most popular.

2. VS Code: Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snip-pets, code refactoring, and embedded Git.

3. GitHub: GitHub, Inc. is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management (SCM) functionality of Git, plus its own features. It provides access control and several collaboration features such as bug tracking, feature requests, task management, continuous integration and wikis for every project.

4. MySQL Server: The MySQL server provides a database management system with querying and connectivity capabilities, as well as the ability to have excellent data structure and integration with many different platforms. It can handle large databases reliably and quickly in high-demanding production environments. The MySQL server also provides rich function such as its connectivity, speed, and security that make it suitable for accessing databases. The MySQL server works in a client and server system. This system includes a multiple-threaded SQL server that supports varied back ends, different client programs and libraries, administrative tools, and many application programming interfaces (API) s.

6.1.2 Description of main modules

Main modules of project are:

- **Sign up:** - In this user can sign up and can able to feed details in the database like username, email, and password.
- **Login: -** From this user can login in website by username and password at anytime to avail more features of website.
- **Explore:** - This is the page where user will get redirected after login. Herehe will see the cards that contain some short information about the particular novel. Here by clicking the read more button on the particular novel card. He will get redirected to particular novel page.
- **Recommendation:** - This is the page where all recommended novels will show in the form of list.
- **Latest Novels:** - This is the page where all latest novels will show in the formof list.
- **Best Seller:** - This is the page where all best seller novels will show in the form of list.
- **Novel Page:** - This is the page where we can see all the details about a particular novel.

6.2 Testing

1. Testing Objective :-

Software testing is a process of executing a program or application with the intent of finding the software bugs. It can also be stated as the process of validating and verifying that a software program or application or product: Meets the business and technical requirements that guided its design and development Works as expected can be implemented with the same characteristic.

2. Testing Scope :-

1) Process: Testing is a process rather than a single activity.

2) All Life Cycle Activities: Testing is a process that's take place throughout the Software Development Life Cycle (SDLC). The process of designing tests earlyin the life cycle can help to prevent defects from being introduced in the code. Sometimes it's referred as "verifying the test basis via the test design". The test basis includes documents such as the requirements and design specifications.

3) Static Testing: It can test and find defects without executing code. Static Testing is done during verification process. This testing includes reviewing of the documents (including source code) and static analysis. This is useful and cost-effective way of

testing. For example: reviewing, walk through, inspection, etc.

4) Dynamic Testing: In dynamic testing the software code is executed to demonstrate the result of running tests. It's done during validation process. For ex- ample: unit testing, integration testing, system testing, etc.

5) Planning: We need to plan as what we want to do. We control the test activities, we report on testing progress and the status of the software under test.

6) Evaluation: During evaluation we must check the results and evaluate the software under test and the completion criteria, which helps us to decide whetherwe have finished testing and whether the software product has passed the tests.

3. Testing Principles :-

Before applying methods to design effective test cases, a software engineer must understand the basic principles that guide software testing. All tests should be traceable to customer requirements. As we have seen, the objective of software testing is to uncover errors. It follows that the most severe defects (from the customer's point of view) are those that cause the program to fail to meet its requirements. Tests should be planned long before testing begins. Test planning can begin as soon as the requirements model is complete. Detailed definition of test cases can begin as soon as the design model has been solidified. Therefore, all tests can be planned and designed before any code has been generated. The Pareto principle applies to software testing. Stated simply, the Pareto principle implies that 80 percent of all errors uncovered during testing will likely be traceable to 20 percent of all programcomponents.

4. Testing Method Used :-

System Testing (ST) is a black box testing technique performed to evaluate the complete system the system's compliance against specified requirements. In System testing, the functionalities of the system are tested from an end-to-end perspective. System Testing is usually carried out by a team that is independent of the development team in order to measure the quality of the system unbiased. It includes both functional and Non-Functional testing.

1) Black Box Testing: Black box testing is a software testing technique in which functionality of the software under test (SUT) is tested without looking at the internal code structure implementation details There are many types of Black Box Testing but followingare the prominent ones –

a) Functional testing - This black box testing type is related to functional requirements of a system; it is done by software testers.

b) Non-functional testing - This type of black box testing is not related to testing of a specific functionality, but non-functional requirements such as performance, scalability, usability.

c) Regression testing - Regression Testing is done after code fixes, upgrades or any other system maintenance to check the new code has not affected the existing code.

2) White Box Testing: White Box testing (also known as Clear Box Testing, Open Box Testing, Glass Box Testing, Transparent Box Testing, Code-Based Testing or Structural Testing) is a software testing method in which the in- ternal structure/design/implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code and determines the appropriate

Chapter 7

Conclusion and Future Scope

7.1 Conclusion

We had this conclusion that we can access a lot of novels that we can't get and able to read physically. It gives access to every person who wants to read. With the help of this website any Bibliophile can come and search for any novel according to their preferences. They can search for a novel by:

Novel's name:

I. Author's name

II. Keyword related to the Novel

Everything nowadays is going online and more and more people are interested in these online services. We're providing world class facilities to the users with very user friendly interface which has a very large collection of Novels.

7.2 Future Scope

Scope of the project is very vast.

- We can build an android app, so the user can easily access the novels in phone through app.
- We can purchase books online also in app and website as well in the future. We can add audio books as well to increase the scope of our website.
- We can give the option of community so the same kind of people can come in contact and have communication.
- As the new books are releasing every month, It's very hard to Buy so many books let alone read them as It's not very feasible for everybody to spend so much money for
- books, To solve this problem, We can start a Book exchange portal in this website where users can exchange the books which they've read and aren't needed anymore to other users in return for some other book of their desire from the user.
- Users can rent a book from the collection of books that we're providing in this website

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