Software Engineering (IT632)

Project Mid Evaluation (Batch 2021-23 semester 2nd)

Group ID:-6

Online eBook Maker

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Table of content

Sr. No.	Title	Page No.
1.	Introduction	3
2.	Scope	3
3.	Process Model	4
4.	Users and stakeholders of project	6
5.	Functional and Non-functional requirements	7
6.	Use Case Model	12

1. Introduction

This document lays out a project plan for the development of "Online eBook Maker". The aim of this project is to provide the complete platform to the user to able to make eBook. It enables user to make eBook as per requirements able to do changes in eBook as needed and start journey in the field of writing eBook.

2. Scope

Digitalization is the rule of the world and is quickly growing. The eBook maker is a **web-based** application which will help user/author to create an eBook free of cost. It aims to make book creation to be a simple and fun process.

The system is composed of mainly two modules – **author and admin**.

The users will be required to get themselves registered and verified for the first time from the admin then they can get access to the site by simply logging in and can have a wonderful writing experience. Existing users can start working on a new book or can resume with an old one (given an author can work on at most 3 books at any given time).

On starting a new book, the author has to provide with the details such as the title of the book, book cover etc. Once the user has completed the eBook they can request admin to send them the said book.

The admin will then verify the details, evaluate the eBook and send the requested eBook via mail.

3. Process Model

According to nature of our project and requirements **Parallel Incremental Model** is the most suitable process model. The online eBook maker project does require regular maintenance and updating. We choose Parallel Incremental Model as a software development model because in our project it is required that the requirements are broken down into multiple standalone modules of software development cycle. Each iteration passes through the **requirements, design, coding and testing phases**. And each subsequent release of the system adds function to the previous release until all designed functionality has been implemented.

The reasons to choose Parallel Incremental model as software development process model are as under:-

- It is relatively simple and easy to understand approach as compared to other model. Also we are able to work on multiple requirements and tasks parallelly.
- We have given higher priority to the user requirements. Also we are much focused to develop prioritized requirements of user first.
- We are using Parallel Incremental model as we are clear with the requirements of end user. Our project online eBook maker will allow users to design and create eBooks free of cost that helps them to start their journey in the field of writing eBook.
- The system is put into production when the first increment is delivered. The first increment is often a core product where the basic requirements are addressed, and supplementary features are added in the next increments like if the user request to add new font, language or template or design for eBook we will add new requirements according to user, test it and release new

update for it. Once the core product is analysed by the client, there is plan development for the next increment. So, Parallel Incremental Model helps us release successive version of our product until the desired system is released.

- It is helpful when the customer demands a quick release of the product as per requirements. So, that user get important functionality easily.
- Errors are easy to be recognized, test and debug.

 Hence, **Parallel Incremental Model** is best suited for online eBook maker.

Parallel Incremental Model
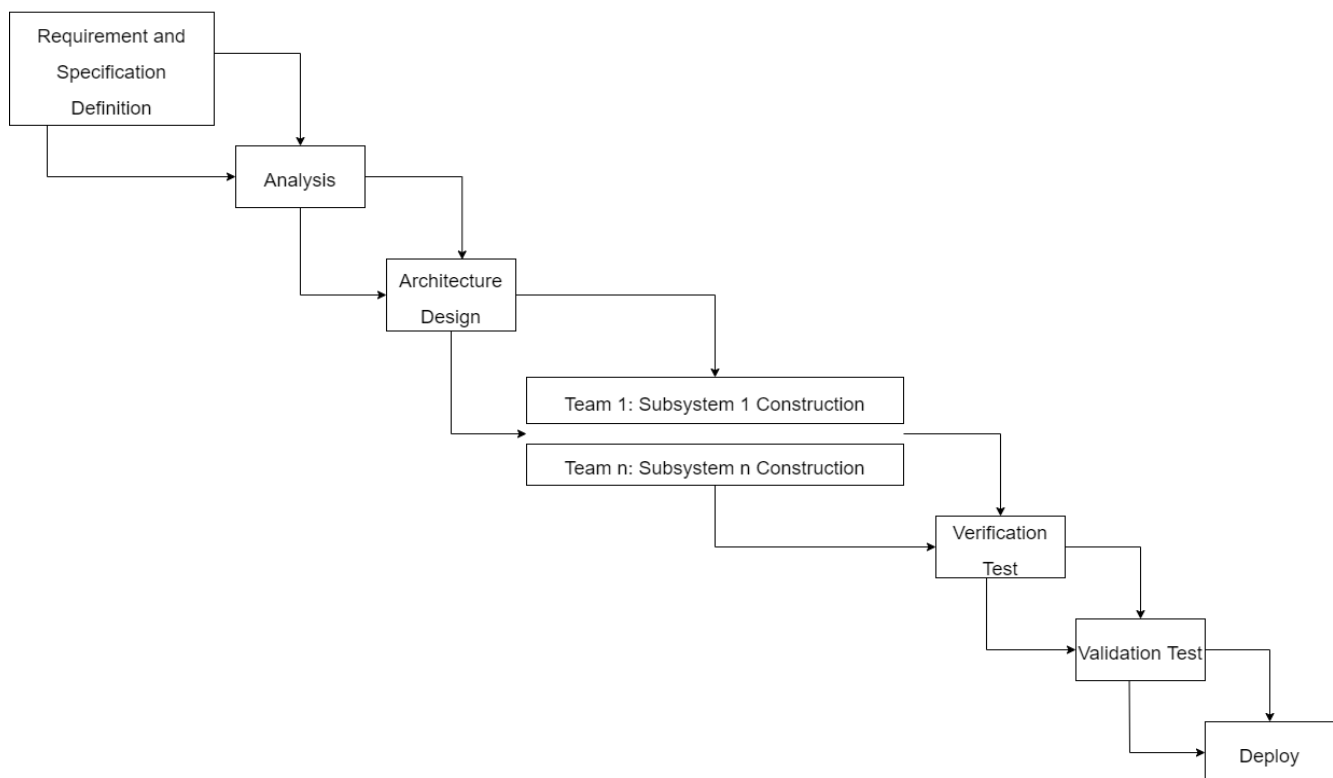
4. Users and Stakeholders of the project

User:

1. Author:
- Author can register, login, and update his profile.
- Author can view his previous works and ongoing projects also.
- Create new book.
- Delete and Update book written previously.
- Reply to feedbacks given by admin.
- Complaint for an inconvenience occurred.
- Request admin to provide any new template.

Stakeholder:

Stakeholder is a person, group, or organization that is actively involved in a project, is affected by its outcome, or can influence the outcome from the system.

1. Admin:

- Admin is the owner of the website who has all the rights regarding the website.
- Approve, Retrieve, Block, and Unblock author.
- Reviewing answer given by author to the feedbacks given.
- Admin can handle the author complaint and can respond to their complaint respective to the complaint made by the author
- Admin can add the notice regarding the events.
- Admin can add new template as per author request or any new available template.

5. Functional Requirements

A functional requirements defines a system or its component. It describes the functions a software must perform. A function is nothing but inputs, its behaviour, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform.

Functional Requirements of online eBook maker are:-

Admin:-

- **View Author: -** Admin can be able to view author profile so that admin can get information about author.
- **Validate Author:-** Admin can be able to validate author based on author profile so that author can be able to write eBook .
- **View Book/Book Reviews:-** Admin can be able to view author book.
- **Manage Complain:-** Admin can be able to manage complain reported by author so that admin can be able to solve them as early as possible.
- **Manage Profile:-** Admin can be able to manage profile so that admin can make changes and update information .

Author:-

- **Register new user:** Author should be able to register as new user so that author can be able to write eBook.
- **Login as existing user:** Author should be able to login as existing user if author registered in past so that author can resume and continue to write eBook.
- **Manage Profile:-** Author can be able to manage profile so that author can make changes and update information.

- **View Confirmation status of eBook:-** Author should be able to see the confirmation status of submitted eBook by author.
- **Create eBook:-** Author should be able to create eBook with all the features and functionality.
- **Edit eBook:-** Author can be able to edit eBook easily as many times author want to edit eBook without any issue .
- **Delete eBook:-** if author want to delete eBook author can be able to delete eBook easily .
- **Able to contact:-** Author should be able to contact admin easily if needed .
- **Book review:-** Author should be able to view book review .
- **Manage review:-** Author should be able to manage book review.

5. Non-Functional Requirements

A non-Functional Requirements defines the quality attribute of a software system. They represent a set of standards used to judge the specific operation of a system. Example, how fast does the website load?

A non-functional requirement is essential to ensure the usability and effectiveness of the entire software system. Failing to meet non-functional requirements can result in systems that fail to satisfy user needs.Non-Functional requirements ensure the reliability, availability, and performance of the software system.

Non-Functional Requirements of online eBook maker are:-

- ### Availability:-

    Our application support for 24/7 time so that user able access the website whenever user want and complete the work without any issue.

- ## Reliability:-

    Technology that is highly reliable functions with the same or similar efficiency after extensive use. This quality attribute specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions.

- **Percentage of the probability of failure:** You can check the percentage of the probability of failure, or failure rate, to determine the reliability of a system. If the percentage is higher, the system is likely to function normally after substantial use.

- **Number of critical features:-** Consider recording the amount of critical failures a system experiences during testing to check its reliability. If the number of failures is low, it means that the system operates properly.

- **Time between critical features:-** Tracking the time between critical failures can help you understand the reliability of a system. When critical failures occur rarely, it means that a system functions normally most of the time.

- ## Maintainability:-

    Maintainability defines the time required for a solution or its component to be fixed, changed to increase performance or other qualities, or adapted to a changing environment. Like reliability, it can be expressed as a probability of repair during some time.

    We are able to solve 75% maintainability in 48 hours , this means that there's a 75 percent chance the component can be fixed in 48 hours.

- ## Security:-

To protect sensitive data, consider to develop Non-functional security features is very important. For example, professionals at healthcare facilities use secure databases to store patients' medical records. The security on their databases may include firewalls to prevent unauthorized access.

Here are examples of typical security measures on online eBook maker:

- **Account creation:-** Systems may require users to create accounts to access applications first time that store information and display profiles. A security system typically grants access to accounts when users enter the correct username and password whenever user write to login again.

- **Password generation :-** An application may not grant access until the user creates a strong password. For example, a strong password might contain a certain number of characters and a capital letter.

- ## Data Integrity:-

Integrity Constraints are the protocols that a table's data columns must follow. These are used to restrict the types of information that can be entered into a table. This means that the data in the Database is accurate and reliable. Data integrity Constraints apply at the column or table level.

The following are some types of constraints that we are applied in our database of online eBook Maker project:

- When no value is defined for a column, the DEFAULT Constraint provides a default value.

- A UNIQUE Constraint ensures that any value in a column is unique.

- Each row/record in a database table is uniquely identified by the PRIMARY Key.

- A FOREIGN KEY recognizes a row/record in any database table uniquely.

• **Usability:-**

Usability refers to the ability to use a particular product, including elements such as:

- **Purpose of Features:-** With high usability, users can easily determine what a feature is and what it can do. For instance, they might predict that tapping a button with a capital letter may open a search bar.

- **Navigation:-** Author can easily navigate for one feature to the other feature. Example:- author can change to italic to underline text without any issue.

6. Use Case Diagram