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Institute and Stationery Management System

1. Introduction:

This system is a web application for stationery and educational institute specially for those institute which provides education to various types of students. This application can be used by corporate that have both institute and stationery side by side or institute or stationery individually. People having only stationery can also use this project as well as people having only educational institute can also get benefit by using this project.

1.1. Problem statement:

In many stationery and institute of our locality approaches manual way to perform their works. From the view of stationery, there is manual selling of books where there is no accurate record of how much sale actually happened in that day as to calculate that how much we have bought from our publishers and how much books are left. Stationery also have to calculate their annual sale and return of books to publisher so that financial process can be carried out. In simple words, stationery have problem due to:

1. Manual billing of book sales
2. Manual calculating of book received from publication and books sent to publication

In educational institute, there are many students and their records are almost manual in most of education system. Educational institute have problem due to:

1. Manual record of students
2. Depend on paper / register/ brain to remember type of student.
3. No proper track of students
4. Difficulty in sending SMS to students
5. Manual billing

1.2. Project as a solution:

This project will help people who will have both educational institute and stationery, people having only stationery and people having educational institute only. This project can help stationery by:

1. Digital billing which includes barcode reader.
2. Printing reports on total sales of books, reports on returning of books to publications.(manually/ monthly/ yearly)

Along with it helps educational institute by:

1. Digital record of students
2. Allocates students at the time of admission
3. Sending SMS to students to give information about class
4. Digital billing
5. Generate manual/month/annual report

2. Aim and Objectives

2.1. Aim

The main aim of project to make work digitalize more than manual in the field of stationery and educational institute.

2.2. Objectives

Some objectives of project are:

- To learn about scope of digitalization
- To manage manual works of stationery and institute.
- To make work easier for people involving in stationery and educational institute
- To get knowledge on programming concept

3. Expected Outcomes and deliverables

The expected outcome of this project would be a web-based application which will have features of both stationery and educational institute management as per choice of user. From side of educational institute, first look of this project will be as a dashboard in which admin/ user can entry details of students regarding admission. User can also send sms and get annual report with the help of navigation. From side of stationery, first look will be simple dashboard which allows user to enter details of books that is to be sold to customer. User can register books through navigation. If user wants to have both features of stationery and educational institute then they can have it by the time of registration.

4. Project risks, threats and contingency plans

4.1. Risk and threats

- Security is main threat of this project. This project should be simple and secure enough so that user who have no technical knowledge should be able to use this project, but it should be also secure so that other outsider couldn't get access to whole system in absence of user/admin.
- Lack of technical knowledge is also one of the main problems of this project as this project should be used by direct owner of educational institute and stationery or staff of those institutions and they may not be familiar to computer like stuffs.
- Convincing user to move manual working system to digital system as they might find it difficult for first time and think manual work will be more easier than this.

4.2. Contingency plans

- Providing different layers of security such as password protection in various functions in order to prevent outsider to access to system.
- Making user comfortable by giving enough information about system and making them aware of advantages of using digital system on manual system of working.
- Providing simple manual books in order to give information about operating system or giving simple training to them.

5. Methodology

There are many methodologies for software development. Some of them are; waterfall, agile, scrum, spiral, joint application, rational unified process etc. We are using Rational Unified Process (RUP) for development of this project.

Rational Unified Process (RUP) is one of the techniques used for software development. It is object-oriented approach which is used for getting effective goals and high-quality software product (techopedia, 2012). There are four phases of RUP methodology. They are:

- Inception:

In this phase, requirement analysis is done. This is the phase which describes schedule, estimation of overall system and risk assessment of project. It also describes scope and goals of the system along with identifying interaction with systems (t4tutorials, 2020). Prototype/ wireframe of system is developed in this phase.

- Elaboration:

Architecture of system is evaluated in this phase of rational unified process. This phase is considered important as it includes analysis of problem domain. Use case diagrams are made in this phase (Christensson, 2006).

- Construction:

This is the phase where development process occurs. In this stage, focus on set on optimizing costs, schedules and quality. User manual, test cases occurs in this stage as the software is designed, written and tested. (master2teach, 2020)

- Transition:

Transition is the last phase of rational unified process in which analysis of system along with its maintenance is done. This is the phase where product is released. (Scott, 2001) .

6. Resource requirement

6.1. Software Requirements

- PHP/ Laravel Framework
- Html/CSS
- Code editor i.e. Visual Studio / PHP storm
- API for SMS integration.
- Bar code reader app if scanner is not available

6.2. Hardware Requirements

- PC with windows 10
- Web cam/ phone with camera/ bar code scanner for scanning bar code of books.

7. Work breakdown Structure

The figure of work breakdown structure is given below:

Institute and Stationery Management System

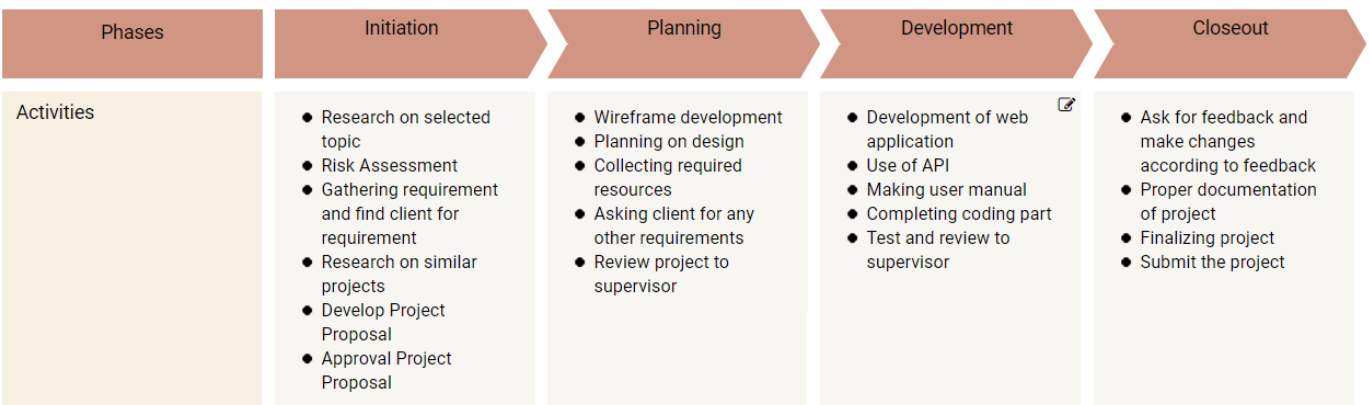


Figure 1 Work breakdown Structure

8. Milestones

- **Milestone 1:** Finalization of topic
- **Milestone 2:** Finalization of Client
- **Milestone 3:** Proposal Submission
- **Milestone 4:** Interim Report Submission
- **Milestone 5:** Development of Web application
- **Milestone 6:** Complete documentation
- **Milestone 7:** Submit the project

9. Gantt Chart

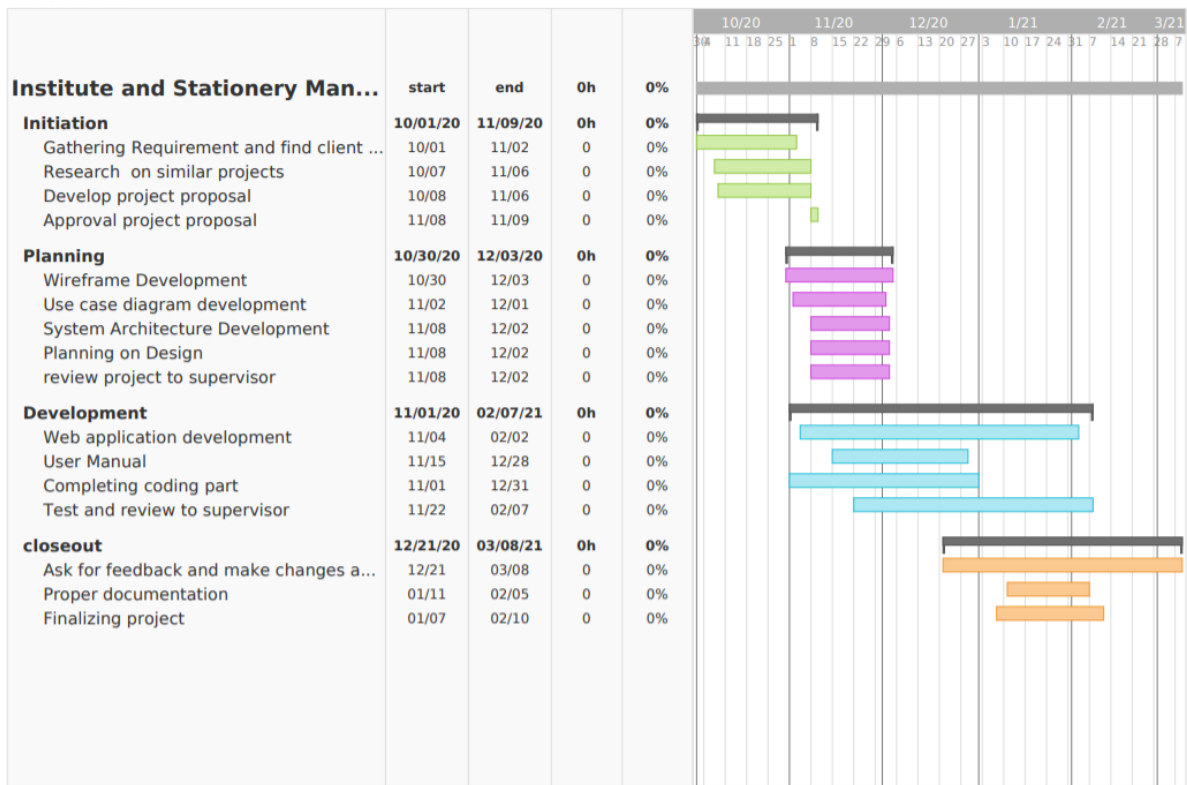


Figure 2 Gantt Chart

10. Conclusion

This Institute and Stationery Management System will help many users who are directly or indirectly related to stationery and educational institute. This project primarily targets to make work digital in field of stationery and educational institute so that it save time and effort in that field. This project will be built on Rational Unified Process methodology.

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