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**A Project Proposal**

**on**

“**Fintrack**”

**COMP 207**

**(For partial fulfillment of 2st Year/ 2nd Semester in Computer Engineering)**

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**Abstract**

Dealing with our everyday, spending plan is a repetitive undertaking and the vast majority of us think that it’s difficult to allow time to truly contemplate upon our financial plan. So, our project aims to help those people who think that it’s difficult to allocate time to figure out their finance by breaking down their account and giving them their month to month finance report after analyzing their data. With the assistance of our project, they will be able to see where they are spending more and how to manage it. Together with that our project will help them deal with their day by day costs with ease.

**Keywords:** *Finance Management, Visualization, Expenditure Categories, Android, React Native, JavaScript, Node.js, MongoDB*

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**Acronyms/Abbreviations**

**HTML Hyper Text Markup Language**

**CSS Cascading Style Sheet**

**JS JavaScript**

# Chapter 1: Introduction

## Background

Personal finance is a sector in which every people struggle in. According to certain study conducted, people who keep track of expenditures and incomes daily are most likely to save more than the one who does not. This shows the need of some kind of application that provides up feature to track and manage our personal finance.

Thus, our project “Fintrack” is android application designed to help people manage their day-to-day expenditure and keep track of their personal finance. It makes it easier for you to integrate all your financial data in one application. Its main functionality is providing you with an excellent platform for creating and tracking your budget, examining your investments performance and generating reports for analyzing your assets. It consists of processes key to financial planning that requires regular re-evaluation and monitoring. The main module of personal finance software is; categorization of income and expenses, financial account tracking, analysis of investment, creation of financial and tax related reports and provision of financial net worth.

Recent Gallup research shows that about 30 percent of Americans have a long-term financial plan. And most of them are using a finance application. The finance application makes it easier to track your budget, investment etc. and this helps in future planning for the better financial development. Personal finance apps like *Mint, Quicken* are trying to solve the monetary problem by offering convenient and efficient ways to manage money. Such finance applications not only track the present financial condition but also helps in future financial planning.

## Objectives

The world is being digitalized. As developers, we need to move forward with technology. Thus, this project helps us developers to apply the knowledge of web programming in real life. The main objectives of the projects are:

1. To make a well-functioning finance software
2. To help people manage their expenses
3. Help people visualize their finance
4. To keep track of expenditure and incomes

## Motivation and Significance

The world is getting busy every next day and in this busy world, we all struggle to manage time for our financial planning. Even as students, we find it hard to figure out where all our money is going and so without its knowledge, it's hard for us to save any money.

So, this project aims to reduce this burden from all of our shoulders. The significance of this project is:

1. Individuals will get their full monthly report with useful tips on managing their finance helping them figure out their finance with ease.
2. Individuals will be able to get clear picture of their finance which will help them decide their next step.
3. Individuals will be able to save more money for future.

Chapter 2: Related Works/Existing Works

There are several other projects that are also working in the field of personal finance. Our project “Fintrack” has been inspired by projects like Quicken and Mint.com. These apps are two of the most popular apps widely used by the users for personal financial management.

**Quicken**:

Quicken has been around for decades since its creation back in 1983. It was created by Scott Cook and Tom Proulx. Quicken has features like budgeting, which makes it easier for us to know how and where our money is being spent. The budgeting feature is provided by linking our various financial accounts-bank accounts, loans, credit cards, investment accounts, etc. Then it automatically imports transactions to synchronize our entire financial life on a single platform. It also enables us to use a single account on multiple devices i.e. we can set up an account on your laptop, but we can also access it from our smartphone. Our information is stored in our own computer rather than Quicken itself, or the cloud. So that it reduces the security risks associated with cloud storage but it also doesn’t give you on-the-go productivity.

**Mint**:

Mint is an open source version of Quicken. It is a web-based personal finance app which was created by Aaron Patzer in 2006. It has features similar to Quicken but they are limited in some areas such as investing activities. Although Quicken and Mint.com are very good software to manage our personal financial activities but there are some major drawbacks. There are too many steps to add transactions. The user interface is rather complex to apprehend. There are reports of duplication of transactions as well. So keeping major drawbacks in mind, our personal financial management app “Fintrack” will be created to tackle these problems. That’s why a simple user interface will available for the user which would be understood by almost anyone and it will be easy to use as well. Likewise, there will be lesser steps to add transactions so as to reduce error from the user and remove the complexity. Security issues like transaction duplication will be concerned seriously and a proper management of database will be used to tackle it.

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# Chapter 3: **Procedure and Methods**

The planning and methods in which we will be doing our project is systematically listed below:

1. Research and Study:

In the starting of our project we will find out about applications similar to ours, spend some time studying those applications and learning the required languages, framework.

1. Graphics Designing

Front end/Graphics is the main part with which user is familiar with and will be interacting with so, front end/graphics should be attractive, user friendly. We will be using React Native Framework for this purpose.

1. Core Programming

Alongside front-end designing, we will be working on making our app function as well. For this we will be using Node.js framework which uses JavaScript as programming language. We will be using MongoDB as our database.

1. Program Testing and Debugging

After completion of our application it is not cent percent sure that our application will work properly at the first try so we will test our program for proper functionality. We will check if there is some kind of syntactical or logical errors and debug those errors. We have allocated time after which our application will be fully functional and complete.

1. Documentation

After developing our application as presented above, documentation part like presentation, report of our project will be prepared.

# Chapter 4: **System Requirement Specification**

1. Software Requirement:

### **Front End Tools**: HTML, CSS, JavaScript, React Native Framework

### **Back End Tools**: Node.js Framework, JavaScript, MongoDB

1. Hardware Requirement:

Since the application is simple, it does not require any complex hardware. Any modern smartphone is capable of running this application.

# Chapter 5. **Project Planning and Scheduling**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|
| Planning |  | |  | | | | | | | | | |
| Research |  |  | |  | | | | | | | | |
| Work Division |  | |  |  | | | | | | | | |
| Learning |  | | |  | | | |  | | | | |
| Front End Development |  | | | |  | | | | | |  |  |
| Back End Development |  |  |  |  |  | | | | | |  | |
| Debugging and Testing |  |  |  |  |  |  |  |  | | | | |

**Figure 1: Gantt Chart**

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