**Proposal**

**Name:** Gauri Shankar Sharma

**Student ID:** 10173183

**Title:** Data-driven mobile solution to expense and income status for making better individual income status.

**Introduction**

|  |
| --- |
| Most people don’t keep a record of how much money they are spending and earning. Sometimes the expense becomes greater than the income which might arise financial problems. No one wants to spend money on unnecessary activity. Therefore, if people can keep a record of how much money they spending, where they are spending most, how much they are earning, wherefrom they are earning most, and look back to their history, then they will get an idea about how to handle their economic status in the incoming days. A mobile/web app will be suitable for this solution from which people can get feedback if they are doing well or not, and they can review their economic achievements and improvements. Some people might use excel sheet to record their expense. But people rarely keep records of their earnings and income sources. Therefore, this app will answer the when, where, how much, and for what questions of their both incomes and expenses. |

**Aim**

|  |
| --- |
| Analyze the expense and income status comparatively for making better economic decisions and not to be at loss. |

**Objectives**

|  |
| --- |
| Learn about how people spend money, how they earn, and what mistakes they often do |
| Research on how people should keep track and manage their economic status |
| Understanding how to encourage people, how to suggest them so that they will listen and agree |
| Understanding how other existing expense management app is helping people |
| Develop an app so that people can keep a record of their incomes and expenses and get positive feedback |
| Report and document findings |
| Report submission |

**Justification**

|  |
| --- |
| Problems   * Spending money more than earning but don’t know how * Don’t know where and how much money spending * Don’t know the income sources   Solutions (Mobile/Web App)   * Keep record of the expenses in the app * Keep record of the incomes and sources * Look back into the income and expense history * Get positive feedback about economic status from the app * Provide achievement points and ranking system to encourage and motivate people |

**Research questions**

|  |
| --- |
| How people spend money and what mistakes they do? |
| How people should keep track and manage their expenses? |
| How to get people attention and encourage them? |
| How other existing expense management app is helping people? |
| How to develop expense management app that could help people more effectively than other existing apps? |

**Literature review**

|  |
| --- |
| There are so many expense management apps that is already available in the market both in the IOS and Android platform. Some of them are free with unique and useful features too.  Money manager is highly rated financial planning, review, expense tracking, and personal asset management app for android. Money Manager makes managing personal finances as easy as pie! Now easily record your personal and business financial transactions, generate spending reports, review your daily, weekly and monthly financial data and manage your assets with Money Manager's spending tracker and budget planner. Graph visualization, online transaction with records, bookmarking, backup, calculation, sub category are its features (Play, 2022).  Mint is a popular free online personal finance application from Intuit that offers a variety of easy-to-use financial planning and tracking tools. The online app is complemented by the free Mint mobile apps for iPad, iPhone, Android, and Windows mobile devices. Automatic categorization, and budget amount suggestions, short- and long-term saving goals, tracking bills, sending financial summaries and alerts via email or text message, creation of spending and income categories, bank-level data security for account aggregation are its features (Elmblad, 2022).  Expense Point is a highly featured expense management app for both IOS and Android. It manages the entire expense reporting process effortlessly. With the Receipt Reader system, a person can just take a photo of the receipts and it’ll read them automatically for you and it’ll even match them to imported Corporate Card transactions. It will also automatically track the mileage on the go with GPS Mileage Tracker system making the expensing of mileage an absolute breeze. Create expense reports, receipt reader, mileage tracker, add expenses via easy user interface, assign credit card charges to reports, link receipt images to expense items, split expenses, report summary view, report detail view, report graph view, approve reports are its features (Store, 2022).  People have to pay some money for extra features in those app mentioned above. Categorizations, Data Visualization, Personalization, and gamification are the most important part in an expense management system. Top-notch security and standards compliance, various bank integrations, AI-driven financial coaching are some are very beneficial for both users and the app owner. People should get enjoyment while using the app and gamification is the way to achieve it. By gamifying the experience, users can be interacted with the app more frequently. And from the user’s perspective, a gamified money app is an effective and fun application that helps them achieve their saving goals better (VadimStruk, 2022). Giving positive feedback about their financial status will also enhance user experience and encourage them to continue their better work. Comparing Monthly income with monthly expense, comparing latest monthly expenses and incomes with the previous month status will also clarify the user’s economic status is improving or not.  Based on my current knowledge of react Js, Flutter, Node Js, and MongoDB, a proper solution for the problem statement will be making app for mobile devices and websites. Various techniques can be used in research methodology such as interview, survey, case study, literature study. Requirement analysis, planning and designing, execution, and reporting are the processes involved in the research methodology. For the software development methodology, waterfall will be better for a person as all the requirements will be clear. Android studio, Visual Studio Code, MongoDB Compass, Google Chrome, Adobe XD, Team Gantt, Visual Paradigm, MS Office are the tools and React Js, Flutter, Dart, Node Js, JavaScript, MongoDB are the technology that could be used during this project. |

**Project plan**

|  |  |
| --- | --- |
| Work | Time |
| Learn about how people spend money, how they earn, and what mistakes they often do | 5 days |
| Research on how people should keep track and manage their economic status | 1 weeks |
| Understanding how to encourage people, how to suggest them so that they will listen and agree | 1 week |
| Develop an app so that people can keep a record of their incomes and expenses and get positive feedback | 2 weeks |
| Report and document findings | 2 weeks |
| Get feedback from the supervisor | 1 day |
| Report submission | 1 day |

**Risk Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk Rank | Risk name | occurrence | impact | Auxiliary Plan |
| 1 | Lack of Research knowledge | Very high | disaster | Learn more |
| 2 | Lack of time due to another module works | Very High | Medium | Manage Time |
| 3 | Health problems | Medium | Medium | Take precaution |
| 4 | Coding Errors | Low | Low | Search in google |

**Conclusion**

|  |
| --- |
| Many people don’t care about the way they spend money and don’t know how their economic status is going down. An expense and income management can solve all the problems related to economic of an individual person because they can visualize their income and expense status and go back in the history, can get positive feedback from the app. Using gamification technique, users can be made more interactive with app, can be motivated to take better economic decisions. Comparing their income with their expenses will help to save their money. |

# **References**

Elmblad, S., 2022. *The Balance.* [Online]   
Available at: https://www.thebalance.com/mint-com-manages-accounts-budgets-and-more-online-1293882  
[Accessed 14 May 2022].

Play, G., 2022. *Google Play.* [Online]   
Available at: https://play.google.com/store/apps/details?id=com.realbyteapps.moneymanagerfree&hl=en&gl=US  
[Accessed 13 May 2022].

Store, A., 2022. *Apple Store.* [Online]   
Available at: https://apps.apple.com/us/app/expensepoint/id1468970164  
[Accessed 15 May 2022].

VadimStruk, 2022. *Relevant Software.* [Online]   
Available at: https://relevant.software/blog/personal-finance-app-like-mint/  
[Accessed 16 May 2022].

**Swot analysis**

|  |  |
| --- | --- |
| Strengths   * Time management * Good coding knowledge * Make infographics | Weakness   * Poor health * Research skill |
| Opportunities   * Solve personal economic problems * Get good results | Threats   * Chance of failure if the project is not completed on time |