**Task II:** User requirements and application specifications.

Choose a development model for their application, and submit user

requirements and application specifications.

**Development Model:**

For the development of the budgeting app, we propose using the Agile development model. This model is well-suited for projects with changing or evolving requirements, such as a budgeting app, and allows for frequent communication and collaboration between team members.

**System requirements**

*User Account Management:*

The application should allow users to create and manage their accounts with unique login credentials, and personal information such as name, email, and password.

*Dashboard and Navigation:*

The app should have a user-friendly dashboard that provides quick access to essential features and functions. It should be easy to navigate and switch between various modules such as expense tracking, income tracking, budgeting, reporting, and recommendations.

*Expense Tracking:*

The application should allow users to record and categorize their expenses with the option to add tags, descriptions, and images. The app should also provide real-time notifications for spending alerts and overspending.

*Income Tracking:*

The app should allow users to record and categorize their income sources such as salary, investments, or freelance work. Users should also have the option to set up automated income tracking, such as syncing with their bank accounts or financial institutions.

*Budgeting:*

The app should allow users to set up budgets for various categories such as groceries, rent, entertainment, and others. Users should be able to customize budgets based on their goals, track progress, and receive alerts for budget deviations.

*Reporting and Analytics:*

The app should provide users with a detailed summary of their financial transactions, such as monthly expenses, income, and savings. Users should also be able to generate reports, graphs, and charts to visualize their financial performance.

*Recommendations and Education:*

The app should provide personalized recommendations and tips to help users improve their financial well-being, such as reducing expenses, increasing income, or saving money. The app should also offer educational resources such as articles, videos, and podcasts to enhance users’ financial literacy.

*Security and Privacy:*

The application should have robust security measures such as SSL encryption, two-factor authentication, and data backup to ensure users’ data is protected. The app should also follow privacy laws and regulations such as GDPR or CCPA to safeguard users’ personal information.

**User requirements**

*User-Friendly Interface:*

The app should have an intuitive and easy-to-use interface that allows users to quickly and easily access all features and functions.

*Real-Time Expense and Income Tracking:*

Users should be able to track their expenses and income in real-time, including the option to categorize, tag, and add descriptions.

*Customizable Budgets:*

Users should be able to set up customized budgets based on their financial goals and preferences, with the option to adjust budgets and receive alerts for deviations.

*Financial Insights and Analytics:*

The app should provide users with insights into their spending habits and financial health, including detailed reports, charts, and graphs.

*Personalized Recommendations and Tips:*

The app should provide personalized recommendations and tips to help users improve their financial well-being, such as reducing expenses, increasing income, or saving money.

*Educational Resources:*

The app should offer educational resources such as articles, videos, and podcasts to enhance users’ financial literacy and help them make informed financial decisions.

*Compatibility with Multiple Platforms:*

The app should be available on multiple platforms such as iOS and Android, and should be compatible with various devices.

*Security and Privacy:*

Users’ personal and financial information should be protected through secure encryption and robust privacy measures such as two-factor authentication and data backup.

**Internal and external stakeholders**

1. Internal stakeholders:

*Project Manager:* Responsible for overseeing the development and implementation of the budgeting app and ensuring that it aligns with the company’s goals and objectives.

*Development Team:* Responsible for designing, developing, testing, and deploying the budgeting app.

*Marketing Team:* Responsible for creating and implementing marketing strategies to promote the app, such as advertising, social media, and email marketing.

*Sales Team*: Responsible for selling the app to potential customers and ensuring that users are satisfied with the app’s features and functions.

*Customer Support Team:* Responsible for providing users with technical support, resolving any issues or concerns, and providing feedback to the development team.

1. External stakeholders:

*Users*: The primary external stakeholders are the users who will be using the budgeting app to manage their finances and make informed financial decisions.

*Financial Institutions:* The app may need to integrate with financial institutions, such as banks or credit card companies, to enable users to track their expenses and income automatically.

*Regulators:* The app must comply with regulatory requirements such as data privacy laws, financial regulations, and consumer protection laws.

*Investors:* Investors who have invested in the development and implementation of the app will have a stake in its success and profitability.

*Partners:* The app may have partnerships with third-party companies, such as financial advisors or insurance providers, to offer additional services or products to users.

**Prioritization and negotiation**

Prioritization and negotiation are essential in the development and implementation of the budgeting app to ensure that it meets the needs of all stakeholders.

Prioritization involves identifying the most critical features and functions of the app and allocating resources accordingly. The project manager and development team should work closely with the marketing and sales teams to prioritize features based on user needs, market demand, and competitive analysis.

The team should also consider the time and resources required to develop each feature and prioritize them based on feasibility and cost-effectiveness. For example, features that require extensive development time and resources but have limited user demand may need to be deprioritized.

Negotiation is necessary to manage conflicting priorities and resolve issues or concerns among stakeholders. The project manager should work with all stakeholders to identify their needs and expectations and facilitate communication and collaboration among them.

Negotiation may involve trade-offs between features, timelines, and budgets. For example, if a particular feature is critical to users but requires significant resources, the team may need to negotiate a longer timeline or increased budget to accommodate it.

Ultimately, prioritization and negotiation require a collaborative and transparent approach to ensure that all stakeholders are satisfied and that the budgeting app meets its objectives.

**Functional requirements**

1. Expense and income tracking in real-time (Must-have)

This feature is essential for the app’s core functionality, allowing users to monitor their finances in real-time.

1. Customizable budgets (Must-have)

Customizable budgets are necessary to align the app’s functionality with users’ financial goals and preferences.

1. Financial insights and analytics (Must-have)

Financial insights and analytics are essential for users to make informed financial decisions and monitor their financial health.

1. Personalized recommendations and tips (Want-to-have)

While personalized recommendations and tips are valuable, they may not be essential for the app’s core functionality.

1. Educational resources (Want-to-have)

While educational resources can enhance users’ financial literacy, they may not be essential for the app’s core functionality.

1. Expense categorization and tagging (Must-have)

Expense categorization and tagging are essential for users to track their expenses accurately.

1. Budget forecasting (Want-to-have)

While budget forecasting is a useful tool, it may not be essential for the app’s core functionality.

1. Two-factor authentication (Must-have)

Two-factor authentication is critical for protecting users’ personal and financial information.

1. Data encryption and privacy measures (Must-have)

Data encryption and privacy measures are necessary to protect users’ personal and financial information.

*Comments:*

The must-have requirements are the essential features necessary for the app’s core functionality, while the want-to-have requirements are features that would enhance the app’s usability and value but may not be critical. The app’s core functionality should be prioritized over want-to-have features.

Two-factor authentication and data encryption and privacy measures are critical requirements to protect users’ personal and financial information, and their implementation should be a top priority.