# Software Engineering

## Feasibility Study Report

## Introduction and an executive summary

## Problem Statement:

People are facing difficulties to stay consistent to their goals. The current market doesn’t provide a one stop platform for all type of activities like fitness, study, personal goals, habit inculcating etc, and are more single activity oriented.

Many apps in the market don’t have a feature sharing of goals with a buddy to stay motivated and track each others progress.

## Stakeholders

The end users of this software :

* Teenagers
* Adults
* Working professionals

## Business Profile

GENERAL BUSINESS INFORMATION

* Hashira
* 6307737202
* [devs.harshira@gmail.com](mailto:devs.harshira@gmail.com)
* IIIT Dharwad
* Founded on 19th January 2023

BUSINESS DETAILS

* App development services
* Specialising in productivity apps
* Goal tracking app in progress

BUSINESS CAPACITY

Human Resources:

* + - * Hashira developers
      * 3 employees.

Technical:

* 2 projects

## Problems in existing system

The existing system lacks a combination of both a buddy system, a variety of activities to track a progress of an and a reward system to keep audience engaged

## *PROJECT SCOPE*

PROJECT NAME **:** A mobile application to monitor our activities.

DATE OF APPROVAL**:** 20/01/2023

**PROJECT DESCRIPTION**

This mobile app through which the users can track their habit and share their progress with others. This app will incorporate a reward system which will award users to for every goal they achieve.

**TIMELINE**

Project is started on 20/01/2023 and expect to be delivered by **10/5/2023.**

**DELIVERABLES**

* A working activity tracking app.
* A sharing buddy method.
* An inbuilt reward system.

**CONSTRAINTS**

* Making it a user friendly experience
* Synchronisation of data
* Implementing all features in estimated time
* Two step authentication
* Making the notifications intriguing.

**ASSUMPTIONS**

* People will be dedicated to use the app

## Methodology and tools used for feasibility study

Brainstorming:

A technique used to generate a large number of ideas in a short amount of time.It encourages novel ideas and put thoughts as soon as they come to mind, in a group each person has a different idea and thought to it.It leads to increased creativity.

Ideas proposed during our brainstorming session:

* Users can track multiple habits at same time.
* They can see and share progress.
* Profiling can be used to store progress of a user.
* A chart to show their combined progress of all the habits.
* Calendar for day to day track-ability.
* Custom settings for every activity they add.
* Award them for small or big milestones they achieve. e.g. 7 day streak award.
* Notification to remind them of their progress.
* Suggesting them different habits they can work on.
* Infusing the app with articles related to their habits.
* Weekly and monthly reports.
* Add task with a custom time frame.
* To-Do list.
* Widgets to display task progress.
* Customisation option(color, icon, etc).

***FEASIBILITY STUDY***

**TECHNICAL FEASIBILITY**

Technical feasibility help us to see if the technology is available for the project. According to our research the technology required to implement this project is:

* Figma for UI/UX
* Flutter for frontend
* Node.js for backend
* AWS(MySQL) for storing data.

All of these technologies are easily available which makes it technically feasible.

**ECONOMIC FEASIBILITY**

The economic feasibility of habit tracking app must also be evaluated. The cost of developing and maintaining the app should be estimated, along with the potential revenue that could be generated by the app. Additionally, the cost of marketing the app should be considered, along with the potential impact of the app on the local economy.

All the resources needed for the development are available for free making it economically feasible.

**LEGAL FEASIBILITY**

Habit tracking app does’t require any sensitive data of the user to function.

It requires email address for the creation of an account which will be encrypted.

This app will ensure that the user’s data is fully protected and not shared with any third party.

**OPERATIONAL FEASIBILITY**

Operation feasibility is performed to see if you have the team to do the project. According to our study we need to work on 4 things that is designing the product, frontend development, backend development and database management.

As designing isn’t a very long process it can be done in with easy.

The 3 member team has the skills that are required to implement this app.

This makes it feasible to implement.

**SCHEDULE FEASIBILITY**

This is performed to check if the project can be completed in the desired time frame.

For habit tracking app the estimated time required is:

* + For design: 1-2 weeks
  + For frontend implementation: 3-4 weeks
  + For backend and database: 6-7 weeks
  + For testing and bug fixing: 2-3 weeks

According to our evaluation this project is doable in the span of 16 weeks(4 months).

**CHALLENGES**

During the building and publishing the habit tracking app , there will be some difficulties which are discussed following :

**1.Competition :**

There are many habit tracking app products available in the market. It is important to differentiate this app from the other products, maintaining unique features & benefits.

**2.Scalability :**

As the business grows, it will be important to ensure that the app can scale to meet increasing demand and continue to provide a high-quality service.

**3**.**Security**:

The app will handle sensitive user data, such as personal information, so it will be important to have robust security measures in place to protect this data from unauthorised access.

**4.Legal and regulatory compliance:**

There may be local and national laws and regulations that the app needs to comply with, and it will be important to ensure that the app is compliant with these.

In terms of competitors, the habit tracker app will be competing with existing habit tracking apps such as Streaks, habitNow, Way to life, habitify & many more. To compete with these existing players, the app will need to offer unique features and benefits, such as buddy system , reward system, or a more user-friendly interface.

**TEAM DETAILS:**

“HASHIRA”

**MEMBERS**

Ekansh Thakur **(21BCS037)**

Jaishana Bindhu Priya **(21BCS045)**

Kunghadkar Pratik Awadhut **(21BCS058)**

**CONCLUSION**

In conclusion, the development of a habit tracking app is a complex process that requires a thorough understanding of the market, technical and operational feasibility, and the needs of users. By conducting a feasibility study, gathering requirements, designing and prototyping, and carrying out a comprehensive testing phase, the app can be developed in a structured and systematic way. Additionally, by addressing challenges such as competition , scalability, data security, and legal and regulatory compliance, the app can be designed to meet the needs of users and deliver the desired functionality.

However, it is important to note that the development of an app is an iterative process, and that new information and changes in the market may arise during the development process. By keeping an eye out for these observations, any potential issues or changes can be identified and addressed early on, helping to ensure the success of the habit tracking app.

The habit tracking app, if implemented successfully, can provide a comprehensive solution for changing one’s habits or adapting new habits , allowing users to easily access the app. Also user can share his/her progress with friends with the help of buddy system. The user will be in tune because of the reward system which will provide user rewards according to his/her progress in that habit. Also with the help of this software the user can track his/her own progress and can improve accordingly. The users will be motivated time-to-time by notifying them on daily basis.