Feasibility Report

“ClearDally”

1. Introduction:

Our app development project, ClearDally, aims at increasing productivity among students to aid their study process. It encapsulates the features like smart reminders and free resources on the topics they are studying to lessen the time required for managing the same, thus ensuring more productivity.

1. Users of the Application Software:

The students, teachers and administrative staff of any Institution will be the primary user base for this app.

  The main use cases are as follows:

Students

* Scheduling work and setting reminders.
* Upload resources related to courses provided by the institution.
* Set timer to keep track of time worked and breaks taken.
* Set alarm that has a flexible ring time and keeps track of the amount of time slept.

  Teachers

* Upload Resources related to their respective subject.
* Check the authenticity of the Resources uploaded by the students.

  Administrative staff

* Moderate the user base of the app.

1. Business profile:

The system is provided on a subscription basis to institutions which will only include the meagre cost of maintaining the app.

1. Problems in the existing system:

There are some apps that already provides some features of this application. But there is none with all the features designed for increasing productivity of students in a particular institution by helping them in multiple aspects of their lives.

1. Project scope:
   * Performance:

At the initial stage, we will be using the app for only the students who will be using privately but no groups. Therefore we will be using the local database for students not exceeding . Larger databases will be featured at a later stage. We will be using Firebase as it provides a great and reliable service for app database management.

* + Security:

Security measures are provided in many aspects of this system.

User authentication: Users will have to authenticate using their username, email address and password.

* + Usability and ease of access:

The user interface is designed to make it easy for any potential user to get familiar with the system within a short period of time.

* + Capacity and scalability

The app can be used by multiple users and institutions at the same time.

* + Availability

The app will be available for use 24/7. The time for repair in case of failure will depend on the severity of the risk.

* + Maintainability

For the app maintenance, we will be using the corrective and adaptive method, where the users will report the bugs as well as we will be updating the software according to the changes in the various mobile devices.

1. Methodology and tools used for feasibility study

Brainstorming:

We looked into the needs of local potential users such as the students of IIIT Dharwad through a verbal assessment and concluded that there is a requirement for a productivity app and included features we required even from personal experiences.

1. Feasibility study:
   * 1. Economic Feasibility

Being a cross-platform application, it will include real-time database management, user-authentication and hosting which are the services which are already available. Also, the system does not consist of any multimedia data transfer, bandwidth required for the operation of this application is very low.

The system will follow subscription-based software pricing. The cost will mainly include the cost of maintaining and debugging the software. At the initial stages the potential market will be the local universities and higher educational institutions.

From these it is clear that the project is financially feasible.

* + 1. Technical Feasibility

Our app is a cross platform application working in both Android and IOS. Some of the major tools we will be using for this application are as follows:

* Flutter
* Node.js
* Firebase
* Visual Studio
* Figma

For all the tools mentioned, we will be using its free versions. Various features will be implemented in accordance with the constraint of time.

* + 1. Resource and Time Feasibility

Resources that are required for the development of this application are:

* Programming device (Laptop)
* Individuals with coding experience
* UI design software like Figma
* App building framework like Flutter.
* Tools like Firebase for back-end management (Real time database management, user authentication, hosting).

So, this project has the required resource feasibility.

* + 1. Social/Legal Feasibility:

ClearDally is made using freely available development tools and open-source libraries which provides the system on a subscription basis to institutions which will only include the meagre cost of maintaining the app.

* + 1. Operational feasibility

The application will solve multiple problems faced by the users (mainly students) using a single app instead of using multiple applications. The app has a straightforward user interface for all actors involved.

The user-friendly interface and intuitive design of the productivity application will make it operationally feasible for users of all skill levels.

The productivity application’s design and operation is flexible enough to adapt to the changing needs of the institution and its users.

1. Challenges and assumptions considered for the project study:

Challenges of the app is bugs in general, lack of good UI/UX and potential risk of security violation.

Bugs in the app can cause the app to malfunction and not perform the desired action. This will lead to substandard user experience. A bad UI/UX will lead the user to avoid using the app, thus a good UI/UX will provoke the user to exploit the app in the desired manner. Chances of security violation in locally stored data are very less as the data is not sent anywhere and is not stored in server aside from local.

1. Technical risks: The app may not function properly or have bugs that could cause user frustration and negatively impact the app's reputation.
2. User adoption risks: The app may not be user-friendly or not meet user needs, leading to low adoption and poor reviews.
3. Revenue risks: The app may not generate enough revenue to sustain its development and operation.

To mitigate these risks, the development team may conduct thorough testing and quality assurance, implement strong data security measures, gather user feedback, and have a revenue model in place. Additionally, it would be important for the team to stay up-to-date on any laws and regulations that may apply to their app.

BY DEVGEEKS…

* HETH THARUN KOORMA (21BCS043)
* G PRASHANT (21BCS038)
* JAIYASH ANMOL RATN (21BCS046)
* ADI JAIN (21BCS003)
* DON POULOSE K (21BCS034)

Glossary/References

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