### FEASIBILITY REPORT

**2.1 MARKET FEASIBILITY:**

The attendance management system aims to automate attendance tracking, improve accuracy and enhance administrative efficiency for the Department of Mathematics and holds promising market feasibility. Manual methods prove time-consuming, prompting both faculty and students to seek a digital solution for efficient attendance tracking. There is a clear demand for our app which is concluded by our survey and discussion led by our team with our primary and secondary stakeholders. Both faculty and students can benefit, as faculty easily take and track attendance, and students gain insight into their attendance status. These factors position the app for a successful adoption, ensuring its viability.

**2.2 TECHNICAL FEASIBILITY:**

The proposed system uses Android for mobile and is compatible with smartphones. Developed in Dart programming language and uses Flutter framework for cross-platform compatibility. It will be easier to modify the existing code if the user constraints are different from the present app since it uses a highly flexible and scalable PostgreSQL database. We chose Flask, a lightweight framework to implement backend API applications as well. The software team does not possess the required expertise to complete the system, but it is possible to expertise the technologies in the given period. With the availability of all needed technical resources and a pre–planning members with the motive of completing the project on time, we can assure you that the project is technically feasible.

**2.3 LEGAL FEASIBILITY:**

User access levels will be set and the system will only allow privileged users. Authentication, Authorization and Audit procedures will be facilitated by the system administrators. Any data or information is accessed only by the authorized user and so the system respects the user’s privacy and security. Since the system administrators are authorized staff of the university, we can promise that our application cannot be misused and also the developer can be trusted 100 per cent since his/her motive is only to complete the project in a user-friendly manner and not to misuse the software. Also, the proposed system will be using open-source software, and there will be minimal licensing and other related issues. Since the proposed system is implemented in our institute, it may be subject to rules and regulations imposed and even funding constraints. However, in this particular scenario, it may not have a big impact. So we conclude that the project is legally feasible.

**2.4 OPERATIONAL FEASIBILITY:**

The Attendance Management System enhances efficiency and accuracy as it records the data and proceeds with any action immediately. It can accommodate the organisation's current and future needs as it grows and can be updated. We planned to get a mentor from our seniors to guide us or get frequent knowledge from them until the system was well-developed. Our schedule of time may help us to provide more features aimed at maximum user convenience. The app is scalable to handle the increasing number of actors and attendance-related data. The department will manage the change from manual attendance tracking to an automated system using our pliant system. This project is sure to provide a perfect user experience, will foster adoption and minimize potential frustration. So the proposed project is operationally feasible.

**2.5 SCHEDULING FEASIBILITY:**

About the timeline of the proposed system, the team has identified the steps to complete the project and planned the deadline for each step. Also, the team has planned the deadline of the prototype demonstration to be at least 1 week before the affirmed deadline so that any change that is incurred on short notice will be rectified in the last few days and also for fine-tuning. The team has identified Trello as the best tool for task tracking and scheduled each member of the team to manage and update Trello. This would surely help the team to ensure the project’s deadline and keep track of the work. The team will be able to give the essential features to the app by our planned deadline. Hence the proposed system holds scheduling feasibility.

**2.6 ECONOMIC FEASIBILITY:**

Saving on time and paper costs of manually entering data and generating reports. Thus improving communications. Improved student services by efficiency in applying for leaves, obtaining their leave information quickly and obtaining other details relating to shortage of attendance. Personal information would be easily managed by the database thus saving storage space on file cabinets and maintenance. Hardware facilities are got enough. The software needed to build the system is open-source software. Thus the software is free of cost. Hence the system is economically feasible.

**2.7 CONCLUSION:**

After analyzing all the above-required feasibilities, we report that the proposed system, implementing the system will be beneficial for both faculties which extends to tackle the issue of faculty's time theft and also to control the repercussions of students in the lack of assistance in supporting attendance by reducing their manual effort. The reduction of time-consuming tasks results in increased efficiency. As a result, the project is entirely feasible and the team proceeds with the project.