# INTERNSHIP TIME TRACKING MOBILE APP

## *Description:*

SineAge University of Science & Technology is proposing to create an online application, which can track the details of Summer Internship done by the students either at the Campus or at any Industry site. The application should also be capable of accommodating intricate diagrams and 3D objects.

This mobile application should be developed using the core Android. It will also use any web services(XML, SOAP) to communicate with the server for information.

## *Objective:*

The objective of this application is to create a mobile application which will take care of the following:

- Register students, create their log ins and allow them to submit their internship activities on a daily basis
- The University Internship Supervisor should be be able view the log in and log out time of the students, their activities and the time spent on each of the activities.

## *Background:*

SineAge University of Science & Technology, with satellite campuses scattered all over the country offers courses related to Computer Science, Information Technology and other disciplines of Engineering. All the students who are enrolled in their final year are required to undertake internship in a company of their choice. The activities of the internship will be performed by the Student at the Company premises. Their attendance, activities of the Internship etc. are logged in a Student Internship Journal. For any reviews with the University Internship SPOC (UIS), the students are required to travel to the University and consult the UIS.

The existing system has the following limitations:

- Some students who are hired in companies which are far from the university may find difficulty in attending the internship reviews scheduled by the UIS.
- This has the possibility of limiting the productivity of the students, since they also have to complete other academic requirements.
- The UIS is able to see the performance of the intern only when he/she presents the journal during the reviews, which means it is not closely monitored.
- The Intenship company will have to prepare manual reports of students' performance from time to time
- It is cumbersome to consolidate reports about the Student Interns.

The proposed Online Internship Time Tracking system is a **Mobile App** which is should have the following

capabilities:

- Capture the Student Information
- Provide Students and UIS with Log in credentials
- Provide reports for Interns' activities on the system
- Other reports as needed by the UIS
- Performance feedback for the Internship Company Supervisor
- Secure system where the Student information can be accessed only by Authorized people from the University / Internship company
- Capability to carry over the previously logged hours and activities if the Student changes Internship Company during the period of Internship

## ***Functional Requirement***:

The mobile app must have the following functional requirements:

### Administrator (University Internship Supervisor)

- The UIS must be able to confirm and navigate through students' and internship information in the database through a separate website. Since the UIS are currently only two and needs to monitor several students, a back-end website layer is needed.
- The UIS must be able to monitor the overall internship status and performance. A list of students must be provided by the website, which can be sorted and filtered out depending on the need. Sort and filter means searching by course, by student and by company.
- The UIS must be able to mark a student as **"complete"** once he/she has met the total rendered hour requirement for the entire internship period.
- The system must be able to generate reports for the UIS. Reports generation may be sorted and filtered per student, company or per course and college. Also, it can be also in a weekly/monthly basis.
- The UIS must be able to add a company's account, so that company supervisors can provide feedbacks about the performance of their interns. The company account is only one regardless of the number of company supervisors.

### Student Intern

- The student must be able to register into the mobile app by providing his Student ID, full name, birthday, and his internship information, which includes the company name, the name of company supervisor, and the company position (e.g. Associate Software Engineer). Confirmation will be made the UIS to prevent unauthorized access.
- The student must be able to log his date, time, and the activities done during a day in the company and have them approved by his/her CS. Activities may include:
  - Work description (the intern's activity)

- Problems encountered in given task
- Solutions made

- The student must be able to see his internship status (complete, ongoing, failed) so he will be updated of his internship.
- The student intern must also be able to see the comments and feedbacks given to him/her by his/her company supervisor.

**Company Supervisor**

- The CS must be able to login in the system through the company account that is registered in the database.
- The CS must be able to comment to his/her own intern and give feedback on his/her performance.
- The CS must be able to approve the time log of his/her intern. Once the time log is approved, it is then deducted to the total time that needs to be rendered by the student.
- The total hour requirement depends on the course of the students:
    - **Computer-related courses**: 500 hours
    - **Engineering-related courses (excluding Comp. Engineering)** : 450 hours
    - **Other courses**: 360 hours

## ***Non-functional Requirement:***

These requirements are very important characteristics of the system. For example attributes such as Reliability, performance, security, usability, compatibility etc.

**Scalability –** The system must be scalable; it must still be functionally used even when the university expands and accepts more interns.

**Availability** – The database must be hosted online, so that student interns can retrieve and add activity data anytime, anywhere

**Performance** – The mobile application must be optimized in performance. Unnecessary resources must not be allocated, and fetching of data must be asynchronous

**Usability** – The system must be optimized for mobile. Responsive design must be attained for students who use tablets and mobile phones.

**Security requirement -** Only bonafide ITU students who are in their final year are authorized to access the system to avoid guest access.