Problem Statement

1. To design a system that could take the attendance of the employees using RFID (radio frequency identification).
2. It will be much cheaper and efficient, we will use Arduino microcontroller which is compatible with RFID card reader.

Project Objectives

1. Read the data from the card and store it in data base with timestamp. Employee’s details can be accessed uniquely using the RFID card assigned to a particular employee. These details can be further extended to calculate the salary of the employees.
2. Administrator will have master card through which he/she can provide access to the fresher’s and terminate the card for the employee’s who are terminated.
3. Abhishek Srivastava will mainly concentrate on hardware part(i.e. programing RFID and Arduino) and Abhishek Sharma will concentrate on Software part(i.e. designing the front end and storing and maintaining the attendance record) . We both will be doing hardware and software interface part as well.

Feasibility Study

1. This system will efficiently check for the attendance of the employee and automatically calculate the salary and working days of the employee. Employee can see his/her own details. The possibility of the error regarding the attendance of the employee will be negligible as the system is fully automated.
2. We have the experience working with the Arduino and we also worked with RFID (with Arduino). The coding will be done in C language (already known). We have prior knowledge about the electrical circuits. Hence we will be able to complete the project in the given time.
3. This system is easy to install. Manager (user) can register/unregister a particular Employee’s card by using master RFID card. Employee (user) can use the RFID card to update his/her attendance into the system. Using his/her RFID’s unique code he/she can access his/her details.

Process Model

1. Incremental Model
2. We have all the required hardware parts necessary for the project. But for creating the interface with the database there are several methods to connect to database. Different languages can be used to create the interface. We will try to choose the best possible way to make the program feasible.

Deliverables

1. The software will record the attendance of the employee and according to that it will calculate the salary of each employee
2. The underlying hardware we will be using is Arduino and software will be MySql, Arduino sketch. The languages will be HTML, Python, embedded C.

Project Scheduling

1. Plan and Schedule the project according to the process model chosen- VISIO file
2. Gant chart and pert chart- VISIO file.