

Indian Institute of Information Technology, Vadodara

College HR Management and Payroll System

Discussed Project Topics

CS301 Software Engineering Project – Autumn 2015

team #02 - ninEngineers

team #02 – ninEngineers:

Sr. No	Roll No.	Name
01.	201351005	Abhijit Singh Panwar
02.	201351006	Yash Choubey
03.	201351017	Rahul Nalawade
04.	201351021	Manu Sharma
05.	201351023	Murtuza Bohra
06.	201351024	Shalinee Singh
07.	201351030	Ajay Shewale
08.	201352006	Nitin Kumar Singh
09.	201352013	Sameer Bhati

Author/ Reviewer:

Author/ Reviewer	New Version	Date
Shalinee Singh	v1.0	05 th September 2015
Murtuza Bohra	v1.1	18 th September 2015

Discussed Project Topics

There were many projects that we considered before finalizing our project to build the college payroll system. The projects that we discussed and the reasons because of which it was discarded are listed below:

1. Do it yourself

A software solution to find ideas to make home-made crafts using the things that the user has at the home. The user is required to enlist the things or items that he has at present with him. The software would find the matching items that could be made using the list of things entered. A detailed description of the procedure to make that item would be provided.

The problems faced are:

- This project had the major part as data collection and compilation. No challenging work was involved.
- The topic of art and crafts did not interest the majority of the group members.
- There was the problem of creating modules and divisibility of work among nine members for this small project.

2. Virtualization of Physics Experiments

As we currently don't have any physics lab, we planned to build a real life like simulation program for the experiments that are in the course of Physics in the first semester.

The problems faced are:

- Real time errors would have been difficult to incorporate. What amount we would have included, it would still have been programed.
- Animation of all the experiments in a real life scenario did not seem feasible.
- Problems like the scope of the system and number of experiments to be included.

3. Online Course Materials

A software solution to facilitate the availability of the course materials of all semesters. The notes, lectures or questions could be uploaded or downloaded.

The problems faced are:

- Handling the duplicacy of the files.
- Handling viruses or corrupt files.
- Maintenance of the software
- Determination of the best file for each course.

4. Single platform for different IDEs

We planned to make a single IDE for the students of our college which would contain all the IDEs that we have used till now, like logisim, jflap, LC3 etc. By selecting the type of tool needed, the user could use the explicit features of that tool. Downloading different tools for different courses would not be necessary.

The problems faced are:

- The doubt whether different tools would be compatible enough to process under the same roof.
- Different tools have different requirements, often clashing with each other. Handling that kind of clashes would require specific knowledge of all the tools that was to be incorporated.

5. Taking attendance of class by clicking a photograph

- This project include huge number of concepts of image processing and it is still a topic of research.

- Also a major part of machine learning is incorporated in this project, which include taking images of a person individually through different angles, also like, beard , non-beard, identifying the same person in a group photograph.

- Limitation of technical resources and time, eg, a professional photography camera, huge data space to create database and store information.

- Maintainability issues because only a person with complete skill set of server handling and image processing, can maintain this dynamic database.

6. E-campus

- A major part of this project, which include a discussion forum and file sharing is done by some of group members in previous projects.

- IIITV management is also not interested in this idea as moodle is installed in the server and do all the work in a more efficient and reliable manner what our software application is supposed to do.

7. Carrier Predictor

- In this project, we are supposed to contact different industries and gather information about their expectation and requirements regarding the skill set of the employees depending on their job.

Problems:

- Major issue is collection of huge amount of data from various industries which is a very tedious and time consuming process.

- Also other than data collection and matching it from the user input there is not so much scope for further development.

8. Hostel and mess management

- Existing software system exists which is developed by students and used by management for registration of students as well as allocation of rooms in hostels. Therefore, making a discussion forum or grievance form is no a work of a team of 9 members.
- Also, some of the basic functionalities of Mess which we are thinking to digitalize is not approved by mess committee as it would create a chaotic situation.