

**Indian Institute of Information Technology, Nagpur**  
**IT Workshop - II (CSP 202)**  
**Even Semester 2019-2020**  
**Take Home Assignment 1**

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**Note: Problem statement for Take Home Assignment 1 and 2 is same. Implementation of this assignment is divided into two parts and each part is given in each assignment. The objectives of each assignment are mention below.**

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**Objectives of Take Home Assignment 1:**

1. Design User interface for the following Problem Statement
2. Validate working of each user interface.

**Objectives of Take Home Assignment 2:**

3. Create a database required for the problem statement
  4. Connect and validate each interface with the back end.
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**I. Problem Statement on Mobile App Development for**

**Payment of Semester Fee and Registration of Course Package**

**Description:** In order to automate the process of semester registration including fee payment and registration of course package, let's build a mobile app which will provide ease of operation to students as well as teachers.

In manual registration process, a **students** is required to first pay the semester fee and then fill a registration form which indicates a list of courses offered in that semester. Based on student's previous semester's result, he/she can select the courses from the pool, sign the form and submit it to the faculty advisor.

Faculty Advisor checks the status of payment (paid/unpaid) and makes the list of students with their course package. With the help of this information, Faculty advisor generates course wise list of students which is then provided to each subject teacher. Also, a consolidated list of students' semester and branch wise is made to show the status of their fee payment.

We have to design an automated system (a mobile app), through which the students will enter the status of their fee payment (paid/requested for extension/unpaid). Based on the payment status, the student will be shown the course package. Student will select the courses and complete the registration.

Our automated system should record the payment status and course package of each student in the institute irrespective of his/her year and branch. The recorded information should be made available to the faculty advisor in the following different formats:

1. List of students (Roll no, Name and Payment Status) which shows the payment status of the each student. Note that app will be used by all the students of the institute irrespective of his/her semester and branch. So, the list should be generated year (or semester) and branch wise.
2. List of students (Roll no, Name, course 1, course 2, ....) which shows the registered courses of each student. Again the list should be generated semester and branch wise.
3. List of students (Roll no, Name) course wise so that this list can be directly made available to the corresponding subject teacher for taking the attendance and other purpose.

**II. Designing User Interface for the application:**

The mobile app for the problem statement mentioned above would require multiple user interfaces. Your job is to first divide the entire application into multiple interfaces. Design each interface and validate it with some sample input. Carefully design each screen with some deep thought.

[Note: Get the interfaces checked by me before you start the implementation if you wish. This will help you to better understand the problem statement and what is expected from you in this assignment.]

**Next part of this app is based on database connectivity which will be given to you in take home assignment 2.**

\*\*\*\*\*Enjoy Coding\*\*\*\*\*