

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Master in Computer Application (Integrated MCA)**  
**Year IV (Semester-VII) (W.E.F. June 2016)**

**Subject Name: Software Project**

**Subject Code: 4470605**

**1. Learning Objectives:**

- a. To be able to develop a system/application using PHP, MySQL
- b. To be able to develop an application using ANDROID
- c. To be able to develop web services using PHP and JSON
- d. To be able to demonstrate the interaction of mobile application with the back-end web server using web services

**2. Pre – requisites**

- a. Knowledge of PHP
- b. Knowledge of ANDROID
- c. Knowledge of web service implementation using PHP
- d. Knowledge of JSON

**3. General guidelines for software project**

- a. The project should be having some uniqueness
- b. Should use object-oriented principles and implement as many concepts possible
- c. Should be developed for solving a domain specific problem OR should be applicable for a particular problem
- d. Documentation
  - i. A proper documentation of the project, giving a clear description of the problem being solved must be provided.
  - ii. The documentation should also include description related to methodologies used in the problem solving
  - iii. The documentation should also describe the work distribution of all the project development team members [if applicable]
  - iv. Should include a description of the iterations /modification/changes/versions during the development process
- e. Code should be self documented and should follow proper coding standards
- f. Must be developed using MVC architecture
- g. Should make use of
  - i. Proper database structure
  - ii. File management where ever applicable
  - iii. Error handling of problematic/unexpected situations of software execution
- h. Use of IDEs is encouraged. Students may be encouraged to explore these IDEs on their own.
- i. The final deliverable of the project should include
  - i. The entire source code
  - ii. Database import file

- iii. Instructions to setup the system
- iv. System requirement specification, help file to install/configure the system
- v. Help file to use the system
- j. The look and feel of the system should be good and user - friendly

**4. Following is expected to be demonstrated**

- a. The execution of the entire PHP project
- b. The execution of the supporting ANDROID mobile application