

**Department of Computer Science and Technology**  
**UkaTarsadia University**  
**M.Sc. (CA) 4<sup>th</sup> Semester**

Paper No.: 040020401

Course Name: Project

Course Credits: 18

Total Hours: Full Semester

Prerequisites: All subjects of previous semesters.

Course Objectives:

To provide professional exposure in an industry so as to study and analyze software requirements to design, develop and test an appropriate solution for the same.

Important Guideline:

[A] Project Guidance:

1. Student can develop the solution in any feasible and desired technology of software need identified.
2. A student is allowed to individually carry out his/her project work.
3. In case if student shall accomplish project work in team, maximum 3 students per team is allowed in same company. If a team insists more than 3 members, prior permission of the Project Cell and of the Programme Coordinator needs to be taken.
4. A student shall be assigned an internal guide by the institute.

[B] Reporting:

1. A student shall submit project confirmation letter/joining letter to Project Cell on or before the given dead line.
2. A student shall be reporting about the monthly progress on company letterhead with signature of external (company) guide to the assigned internal guide.
3. In case, if the student is not being able to submit the hard copy on given deadline, an email with the scanned copy of the document to the concerned internal project guide. Such scanned copy should be sent from concerned external guide's email account.
4. Internal guide shall maintain documents submitted by a team of students.
5. For any query, a student can approach to the internal guide assigned or Project Coordinator or the Programme Coordinator personally, on phone or via email.

6. In case of any critical challenges faced during project should be immediately reported to internal guide through an email cc: to Coordinator or the Programme Coordinator.

[C] Evaluation and Assessment:

1. A continuous internal evaluation scheme shall be in practice on the basis of progress report to achieve quality and timeliness in project work.
2. For CIE parameters refer Annexure II.
3. There shall be internal presentation of 30-45 minutes duration while an external presentation of 45-60 minutes, which shall be evaluated by examiner panel.
4. For internal and external presentation refer Annexure I that contains presentation template details.
5. During presentation, a student has to bring code with working demo. If company does not provide code or any confidential information, student or team must have to produce **Non Disclosure Certificate** from the company.
6. In case of above, students must have to produce certificate indicating the same in hard copy with the sign of external guide in each presentation (internal as well as external).
7. Student shall use presentation slides explaining the project work including necessary screen layout.
8. Student may be asked to write the code related to the project during presentation.
9. Working demonstration of project is must for internal and external evaluation.
10. Refer Annexure III that represents objective and marks weightage of internal presentation.
11. No make-up work shall be accepted for missed or failed presentation.

**Bonus and Penalty rules:**

- Student shall receive 10% of total internal marks as bonus if he/she has submitted confirmation letter, joining letter, work progress reports and project document progress report in time.
- Late submission of confirmation letter, joining letter, work progress reports or project document progress report shall be penalized as 5% of full marks per day for maximum five days after the cutoff date. In case, if a student has failed to meet the deadlines, he/she shall receive zero marks in particular parameter.

[D] Project Report:

1. A student must have to submit two project document progress reports to the internal guide as partial verification of project document.
2. A student and internal guide have to jointly adopt the method for verification either personally or via email whatever they preferred.
3. Refer Annexure IV for content and weightage in both project document progress reports.
4. The student must have to submit hard bounded copy of project report in the prescribed format along with soft copy in CD on the date of internal presentation with dual approval of internal and external guide as well as signed certificates from institute as well as industry by concern authority.
5. Refer Annexure V for project report format and Annexure VI for front-page format.

Annexure I. Presentation template

- Project title, team member names, enrollment numbers, guide name
- Project definition
- Identification of Needs
- Functional and nonfunctional requirements
- Technology Used
- Conceptual Diagram for easy understanding
- User Interface Design (Screenshot of functionality implemented and reports generated by working project)
- Test Cases (Test case no, Description, Expected output, Actual Output, Result (Pass/Fail), Remarks)
- Critical code of project and/or Working demo

Annexure II. CIE Parameters

The weightage of University examination shall be as per the University regulations. Composition of CIE shall be as follows:

<b>Assess ment Code</b>	<b>Assessment Type</b>	<b>Occurrence</b>	<b>Weightage in CIE of 260 marks</b>	<b>Date of Submission / Presentation</b>
A1	Confirmation Letter	1	03 X 1 = 03	30 <sup>th</sup> November 2015
A2	Joining Letter	1	02 X 1 = 02	11 <sup>th</sup> January 2016
A3	Work Progress Report	4	10 X 4 = 40	1. 20 <sup>th</sup> February, 2016 2. 26 <sup>th</sup> March, 2016

				3. 23rd April, 2016 4. 21st May, 2016
A4	Internal Presentation and Viva	1	140	20 <sup>th</sup> June, 2016
A5	Project Document Progress Report and Viva	2	35 X 1 = 35 40 X 1 = 40	1.16 <sup>th</sup> April, 2016 2. 04 <sup>th</sup> June, 2016

Annexure III. Objectives and marks weightage of internal presentation

Objective:

- To verify, students have designed and developed a required software application.
- To assess of the system analysis skill, technical skill and presentation skill of student.
- To assess software testing related skills of student.
- To identify individual contribution and efforts made by a student for the project.
- To provide suggestion with respect to improvement in project work and presentation.

Marks weightage:

Parameter	Marks(140)
Functional and non-functional requirements	30
Clarity regarding requirement	20
Technical Knowledge	30
Conceptual Diagrams and Data Dictionary	15
Presentation and communication skills	15
Implementation and Testing	20
Viva	10

Annexure IV.

Project Document Progress Report 1:

Parameter	Marks(35)	Topics for partial submission from project report
Requirement Gathering and Analysis	15	Chapter 1 , 2, 3 and 4.1
Conceptual Diagrams and Data Dictionary	15	
Reporting	05	

## Project Document Progress Report 2:

Parameter	Marks(40)	Topics for partial submission from project report
Implementation or Working demo	15	Full Document
Validation and Testing	10	
Incorporation of suggestion given in 1 <sup>st</sup> project document progress report	10	
Reporting	05	

### Annexure V. Report format

- i. Title Page**
- ii. Project Certification Form (From institute)**  
[The certificate should be duly filled signed by internal project guide and program co-coordinator.]
- iii. Project Certification Form (From industry)**  
[The certificate should be filled signed by concern authority from industry (external project guide, company owner, HR authority, etc.)]
- iv. Non-Disclosure Certificate**  
[Only if company does not provide code and data dictionary]
- v. Acknowledgement**  
[All persons (e.g. guide technician, friends, and relatives) and organization/authorities who/which have helped in the understanding of the project shall be acknowledged.]
- vi. Table of Contents with page numbering**
- vii. List of Tables, Figures, schemes**
- 1. Introduction**
  - 1.1. Purpose**  
[Purpose means the objective to develop a project. Purpose describes what a project is trying to achieve.]
  - 1.2. Scope**  
[Project scope should have a good idea of what the project consists of (and what will not be part of the project).This statement will give a view of the project.]
  - 1.3. Definition, Acronyms, and Abbreviations**  
[An abbreviation/acronym is a shortened form of a word or phrase.  
Abbreviation example: C.A. means Chartered Accountant  
Acronym example: ft., which stands for feet  
etc., which stands for et cetera  
Definition: a statement of the exact meaning of a word]
  - 1.4. Technologies to be used**  
[Mention the technologies i.e. hardware and software to be used in your project development and required for deployment.]

## **2. System Analysis**

### **2.1. Identification of Need**

[Need describes the problem or issue, or situation where something needs to change to make things better, for a person, a group of people, an environment or an organization.]

### **2.2. Preliminary Investigation**

[This phase examines the existing system (automated/manual) in following phases:

- System performance evaluation.
- Detect system failure.
- User request or recommendation.]

### **2.3. Feasibility Study**

[The purpose of feasibility study is not to solve the problem, but to determine whether the problem is worth solving. This helps to decide whether to proceed with the project or not. The feasibility study concentrates on the following area.

- Operational Feasibility
- Technical Feasibility
- Economic Feasibility]

**Note:** Content should be placed which must be related to concerned project only.

### **2.4. User Characteristics**

[Identify classifications of users of your system. E.g. System administrator, client. And write user wise functionality available in proposed system.]

### **2.5. Constraint**

[Identify the risk of your project. E.g. Business Constraints (finance), Technical Constraints (resource, time).]

### **2.6. Software development process**

[Software development methodology to be used in your project. E.g. Waterfall development, Prototyping, Incremental development, Iterative and incremental development, Spiral development, Rapid application development, Agile development, Code and fix, Other]

**Note:** Content should be placed which must be related to concerned project only.

## **3. UML Description**

### **3.1. Use case diagram**

[A use case diagram defines interactions between external actors and the system to attain particular goals.]

### **3.2. Activity diagram**

[Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.]

## **4. System Design**

### **4.1. Data Dictionary, integrity constraints**

[A set of information describing the contents, format, and structure of a database and the relationship between its elements used to control access to and manipulation of the database.]

### **4.2. User Interface Design**

[Snap shot of a project including validation with caption below]

### **4.3. Reports (if any)**

[Snap shot of a project reports including input with caption below]

**5. Testing**

- 5.1. Test cases for unit testing
- 5.2. Test cases Integrated testing

**6. Future scope and further enhancement of the Project**

**7. Learning during Project Work, i.e. "Experience of Journey during Project Duration"**

**8. References**

[Enter the reference i.e. web or book taken for project development.]

**Guideline for Report Formatting:**

- Use A4 size page with 1" margin all sides.
- Header should include Project title and footer should contain page number and enrollment numbers.
- Chapter Name should be of Cambria font, 26 points, Bold.
- Main Heading should be of Cambria font, 16 points, Bold.
- Sub heading should be of Cambria font, 12 points, Bold.
- Sub heading of sub heading should be of Cambria font, 12 points, Bold, Italic.
- Paragraph should be of Cambria font, 12 points.
- Line spacing - 1.5 lines, before - 0, after - 0.
- No chapter number for references.
- Before chapter 1, give page number in roman letter (Title Page, Project Certification Form, Acknowledgements, Table of Contents/Index with page numbering, List of Tables, Figures, Schemes and Summary/abstract of the project work).

**Annexure VI. Front page format:**

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

<<Student's Name (Enrollment Number)>>,

<<Student's Name (Enrollment Number)>>

at

<<Company Name>>,<<city>>

Guided By,

<<Internal Guide Name>>

in partial fulfillment of the requirements  
for the Degree of Master in Science (Computer Applications)  
Department of Computer Science and Technology,  
UkaTarsadia University, Bardoli, Surat.

June 2016.