Faculty of Computer Science and Technology
Uka Tarsadia University
MCA(4th Semester)/MSc(CA) (2nd semester)

Paper No.: 040010405/040020207 Course Name: Project

Course Credits: 4 Total Hours: Part Time, 4 Months

Prerequisites: Open Source Technology, Introduction to Web Development, Relational DBMS, Software Engineering.

Prerequisites by Topics: HTML, JavaScript, SQL.

Course Objectives:

The objective of the project is to help the students to study, analyze and design software or utility for research problems focused in the recent era applications and problems in the area of computer science and persistent in industry. To gain rich experience in developing software project, prepare the students for analyzing and programming for industrial problem.

Important Guideline:

[A] Time and Duration:

1. Project duration shall be of 4 months and shall be carried out at the institute.
2. Project shall be based on course 040010403/040020209-Web Technology.

[B] Project Guidance:

1. A project shall be done in team.
2. A student team can consist of 5 members of same division.
3. A team shall submit project definition to project committee at the end of first week after commencement of the semester.
4. Each student team shall be allocated a guide by the committee during the second week.
5. A meeting shall be organized between student team and guide during second week for verification of project definition.
6. Once the project definition is verified by guide, revised project definition with basic functionality and features shall be submitted to guide at the end of third week after commencement of the semester.
7. For any query, a student can approach to the guide or project committee members.

[C] Reporting:

1. A student shall strictly maintain a log book. Student need to sign into guide's log book and need to take guide's signature into his/her log book. It is students' responsibility to properly maintain the log book. Refer Annexure I for Logbook format.
2. A student shall have to report about the project's progress to guide at least twice in a week.

[D] Evaluation and Assessment:

1. To achieve quality and timeliness in project work continuous internal evaluation and external evaluation scheme has been adopted.
2. Continuous internal evaluation shall be done on the basis of presentation (A1) and work progress analysis report (A2) defined by the project committee.
3. Guide shall assign work individually to each team member for each work progress analysis report and same applies for the evaluation.
4. There shall be 2 internal presentations including viva and 1 external presentation of the project work.
5. Each work progress analysis report shall have evaluation out of 20 marks. Distribution of this 20 marks will be announced in advance by project committee after due approval of Director.
6. During presentation, a student has to bring log book and code. Student shall use presentation slides to explain the project work. Refer Annexure II for Presentation template.
7. Student may be asked to write the code related to the project during presentation viva.
8. Live demonstration of project is mandatory for internal and external evaluation.
9. No make-up work shall be accepted for missed or failed presentation.
10. Student teams shall receive up to 10% marks as bonus for submitted work progress analysis report before deadline.
11. Late submission shall be penalized as 5% of full marks per day for maximum two days after the deadline. In case, if a student has failed to meet the deadlines, he/she may be restricted to appear in internal/external project viva.
12. Refer Annexure III for CIE Parameters, Objectives of Presentations and Marks weightage for Presentations.
13. Refer Annexure IV for details related to work progress analysis report.

[E] Project Report:

The student shall have to submit his/her one spiral copy of project report compulsorily in the prescribed format along with soft copy in CD. Refer Annexure V for Report format and Annexure VI for front page format of MCA 4^{th} semester students and Annexure VII for front page format of MSc(CA) 2^{nd} semester students.

Annexure I

Student's Logbook format

Team No:		Class and Division:	
Guide Name:		Project Title:	
Student Id:		Student Name:	

Date	Task Assigned	Comment for Student	Guide Signature

Guide's Logbook format

Team No:		Class and Division:
Guide Name:		Project Title:

Date	Enrollment No.	Task Assigned	Comment for Student	General Comment	Student Signature
	<enrollment1>				
	<enrollment2>				
	<enrollment3>				
	<enrollment4>				
	<enrollment5>				

Annexure II

Presentation Template:

- Project title, team member names, enrollment numbers, guiding team
- Project definition
- Identification of Need
- Functional and nonfunctional requirements
- Technology Used
- Use Case Diagram
- Activity Diagram

- Data Dictionary
- User Interface Design (Screenshot of functionality implemented and reports generated by working project)
- Test Cases (Screenshot of validations performed in project)
- Additional features implemented
- Critical code of project

Presentation template is generalized. The First Presentation shall contain minimum first eight points listed above. In the second presentation, the students shall emphasize on implementation of project.

Annexure III

Assessment Code	Assessment Type	Duration of each	Occurrence	Weightage in CIE of 20 marks	Remarks
A1	Internal Presentation & Viva	30 minutes	2	12 x 2 = 24	23-25 April 15, 19-21 march 15
A2	work progress analysis report	-	4	4 x 4 = 16	1. 09-Feb-15 2. 02-Mar-15 3. 10-Apr-15 4. 22-Apr-15

Objectives of Presentation 1:

- To verify, that the students are on right path of project execution.
- To assess the system analysis skills and presentation skills.
- To verify SRS, UML Diagrams and Data Dictionary.

Marks weightage for Presentation 1:

Parameter	Marks
Clarity of requirements	15
Data dictionary	10
UML Diagrams	10
Presentation Skills	05

Logbook	05
Viva	05

Objectives of Presentation 2:

- To verify that the students have fulfilled the requirements.
- To verify that students have implemented in their project work the comments/suggestions of improvement given during presentation 1.
- To assess presentation skills, system analysis skills and technical skills.
- To verify code and coding standards.
- To provide an insight for modification, enhancement into the current work and suggestions for improvement for better execution of succeeding work including external presentation.

Marks weightage for Presentation 2:

Parameter	**Marks**
System Understanding	10
Technical Knowledge	10
Demonstration	15
Implementation of Previous suggestions	05
Presentation skills	05
Viva	05

Annexure IV

Work Progress Analysis Report 1:

Parameter	Marks	Topics for partial submission from project report
Requirement Gathering and Analysis	10	Chapter 1 and 2
Reporting	10	

Work Progress Analysis Report 2:

Parameter	Marks	Topics for partial submission from project report
UML & Design	10	Chapter 3 and 4.1
Reporting	10	

Work Progress Analysis Report 3:

Parameter	Marks	Topics for partial submission from project

		report
Implementation	5	Chapter 4 and 5
Technical Depth	10	
Reporting	5	

Work Progress Analysis Report 4:

Parameter	Marks	Topics for partial submission from project report
Demonstration	10	Full document
Validation and Testing	5	
Reporting	5	

Annexure V:

Report Format:

i. **Title Page**

ii. **Project Certification Form**

[The certificate should be duly filed signed by project guide and program co-coordinator.]

iii. **Acknowledgements**

[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.]

iv. **Table of Contents with page numbering**

v. **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]

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

[Indentify 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]

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]

4.3. Reports (if any)

[Snap shot of a project reports including input]

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 tile 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:

PROJECT

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

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

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

in partial fulfillment of the requirements

for the Degree of Master of Computer Applications

Shrimad Rajchandra Institute of Management and Computer Application,

Uka Tarsadia University,

Bardoli, Surat.

June, 2015.

Guide: <name_of_guide>

Annexure VII:

PROJECT

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

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

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

in partial fulfillment of the requirements

for the Degree of Master in Science (Computer Application)

Department of Computer Science and Technology,

Uka Tarsadia University,

Bardoli, Surat.

June, 2015.

Guide: <name_of_guide>