Uka Tarsadia University

5 Years Integrated M.C.A.

DSE10 Project (060060609)

6th Semester

EFFECTIVE FROM JANUARY 2017
Course Code: 060060609
Course Title: DSE10 Project
Course Credits: 10
Prerequisites: All subjects of previous semesters.
Objectives: To identify, design, develop and implement solution in form of software or utility for problem focused in the recent era, which also imbibes professional and ethical responsibility.

Course Outcomes: Upon completion of the subject students will be able to

CO 1. Identify the need for computer application in a real-world problem.
CO 2. Analyze the requirements, design, develop and test full-featured computer application and perform testing using advanced software development concepts.
CO 3. Explain computer application by writing a technical report.
CO 4. Develop leadership skills and team-work attitude.
CO 5. Explain and demonstrate the idea of computer application and its implementation by presenting the work.

Important Guideline:

[A] General Guidelines:
1. It is a part time project of 3 months duration.
2. A project shall be done in a team consists of usually 3 to 4 students. Team shall be formed in a first week after commencement of semester by students.
3. A student team can use any platform/technology for implementation and testing of a solution.
4. Students can carry out their project work internally or externally.
5. Decision of Project Committee shall be final.
6. An internal guide will be allocated to each team by Project Committee.
7. A team has to submit a hard copy document signed by students as well as by internal guide containing project definition, functional requirements, specifically advanced features and technology to be used after approval of guide in second week after commencement of semester. If students doing project at industry have to submit confirmation and joining letter from company before commencement of semester.
8. For any query, a student can approach to the Guide and/or Project Committee members.

[B] Reporting:
1. A student shall maintain a log book. Refer Annexure I for proposed logbook format.
2. Students doing project at industry have to take external guide's signature into his/her log book, otherwise of internal guide.
3. A student doing project at institute shall have to report about the project’s progress to guide at least three days in a week.

[C] 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 Progress Report (A1), Presentation (A2) and Project Report (A3) finalized by the Project Committee.
3. There shall be two submissions of Progress Report(A1). In which students have to submit log book of particular duration with guide signature.
4. There shall be two internal presentations (A2) of 30-45 minutes duration while an external presentation of 45-60 minutes, which shall be evaluated by examiner panel.

5. During presentation, a student has to bring log book and working code. Student shall use presentation slides to explain the project work. Refer Annexure II for proposed content to be covered during presentation.

6. Student may be asked to write the code related to the project during presentation viva by panel of Evaluators.

7. Demonstration of usages of advanced concepts/features shall be expected during presentation.

8. Refer Annexure III for CIE Parameters, Objectives of Presentations and Marks weightage for Presentations.

9. There shall be two submissions Project Report(A3). In which students have to submit partial or full document of their project.

10. Refer Annexure IV for content and parameters of Project Report.

11. No make-up work shall be accepted for missed or failed presentation.

12. Late submission of work Progress Reports or Project 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 and internal guide have to jointly adopt the method for verification.

2. A student must have to submit two project reports to the internal guide as partial verification of project document.

3. Refer Annexure IV for content and weightage in both project 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 guide as well as signed certificates from institute by concern authority.

5. Students doing project at industry 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.

6. Refer Annexure V for project report format and Annexure VI for front-page format.

[E] Submission:

1. Project reports and final document must be in .pdf format at time of submission task.

2. Naming convention of any soft copy submission file must be `'<TeamNo>_<AssessmentParameter>_<FileExtension>'` format only. For ex. A10_WorkProgressReport1.pdf, A09_InternalPresentation1.pptx

3. In the CD, a team have to submit code, database backup, softcopy of each work progress report, both presentations, and final project document. A team may add any significant file which they have presented or submitted to their guide i.e. animation video, video of working project demonstration, etc.

4. On the CD mention Team number, Project title, and enrollment number of each team members in ascending order.

5. A team has to submit all the aforementioned submission to their respective guide who shall further submit it to project committee.

[F] UFM:

1. If the project found copied, a penalty shall be imposed to team.

2. Contribution of all members is expected in Project. A penalty shall be imposed to an inactive member(s).
Annexure I

Logbook format:

<table>
<thead>
<tr>
<th>Team No:</th>
<th>Class and Division:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title:</td>
<td></td>
</tr>
<tr>
<td>Guide Name:</td>
<td>Internal:</td>
</tr>
<tr>
<td>Company Name:</td>
<td>&lt;&lt;If students working at industry&gt;&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Enrollment No.</th>
<th>Task Assigned</th>
<th>Comment for Student</th>
<th>General Comment</th>
<th>Student Signature</th>
<th>Guide Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;enrollment1&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;enrollment2&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;enrollment3&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;enrollment4&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;enrollment5&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annexure II

Presentation should include like:

- Project title, team member names, enrollment numbers, guide name (If students doing project at industry then also add company name, external guide name)
- Project purpose and scope
- Functional and nonfunctional requirements
- Technology Used
- Conceptual Diagram for easy understanding i.e. Use case diagram, activity diagram, sequence diagram
- User Interface Design (Screenshot of functionality implemented and reports generated by working project)
- Test Cases (Screenshot of validations performed in project)
- Critical code of project

Presentation template is generalized. In both presentations, students shall emphasize on implementation of project.

Annexure III

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

<table>
<thead>
<tr>
<th>Assessment Code</th>
<th>Assessment Type</th>
<th>Duration of each</th>
<th>Occurrence</th>
<th>Each Of Marks</th>
<th>Weightage in CIE of 120 marks</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Progress Report</td>
<td>-</td>
<td>2</td>
<td>20</td>
<td>10 X 2 = 20</td>
<td>Evaluated by Internal Guide. Taken in 5th week and 9th week of</td>
</tr>
</tbody>
</table>
### 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.
- To verify initial work regarding implementation of project.
- To provide an insight for modification, enhancement into the current work and suggestions for improvement for better execution of succeeding work.

### Marks weightage for Presentation 1:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Marks (50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement Analysis</td>
<td>15</td>
</tr>
<tr>
<td>UML Diagrams and Data Dictionary</td>
<td>10</td>
</tr>
<tr>
<td>Presentation Skills</td>
<td>10</td>
</tr>
<tr>
<td>Viva and Demonstration</td>
<td>15</td>
</tr>
</tbody>
</table>

### 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.

### Marks weightage for Presentation 2:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Marks (50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of project work</td>
<td>15</td>
</tr>
<tr>
<td>Technical Knowledge and Testing Skill</td>
<td>15</td>
</tr>
<tr>
<td>Presentation and communication skills</td>
<td>05</td>
</tr>
<tr>
<td>Viva</td>
<td>15</td>
</tr>
</tbody>
</table>

### Annexure IV:

**Project Report 1:**
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Marks(40)</th>
<th>Topics for partial submission in project report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement Gathering and Analysis</td>
<td>20</td>
<td>Chapter 1, 2, 3 and 4.1 as format discussed in Annexure V + logbook Xerox</td>
</tr>
<tr>
<td>Conceptual Diagrams and Data Dictionary</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>05</td>
<td></td>
</tr>
<tr>
<td>Viva</td>
<td>05</td>
<td></td>
</tr>
</tbody>
</table>

**Project Report 2:**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Marks(40)</th>
<th>Topics for partial submission in project report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation or Working Demo</td>
<td>10</td>
<td>Full Document as format discussed in Annexure V+ logbook Xerox + Suggestions sheet</td>
</tr>
<tr>
<td>Validation and Testing</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Incorporation of Suggestion given in 1st project document progress report</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>05</td>
<td></td>
</tr>
<tr>
<td>Viva</td>
<td>05</td>
<td></td>
</tr>
</tbody>
</table>

**Annexure V:**

Report Format:

1. **Title Page**
2. **Project Certification Form**
   [The certificate should be duly filled signed by internal project guide and program coordinator.]
3. **Certificate**
   [Signed by students assuring about originality of work]
4. **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.]
5. **Table of Contents with page numbering**
6. **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: O.S. means Operating System
   Acronym example: GHz, which stands for GigaHertz 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**
2.2. Functionalities
[This phase describes the functionality in system in following two parts:
• Usual functionalities.
• Distinct functionalities.]

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

2.4. Software development process
[Software development process model methodology to be used, like e.g. Waterfall development, Prototyping or Other]

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

3. Conceptual Diagram
3.1. Use case diagram
[A use case diagram defines interactions between external actors and the system to attain particular goals.]

3.2. Data flow diagram
[Activity diagrams are graphical representations of workflows of data in the system]

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
[Snapshot of a project including validation with caption below]

4.3. Reports (if any)
[Snapshot of a project reports including input with caption below]

5. Testing
5.1. Test cases

5.2. Testing Reports including description

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, book or any other reference document 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:

PROJECT

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

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

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

at

<<Company Name>>, <<city>> <<If applicable>>

Guided By,

<<Internal Guide Name>>

<<External Guide Name>>

in partial fulfillment of the requirements

for the Degree of 5 Years Integrated Master of Computer Applications

Shrimad Rajchandra Institute of Management and Computer Application, Uka

Tarsadia University.

June, 2018.