

Faculty of Engineering and Technology			
Ramaiah University of Applied Sciences			
Department	Computer Science and Engineering	Programme	B.Tech
Semester/Batch	4 th /2017		
Course Code	CSC210A	Course Title	Software Development Fundamentals
Course Leader(s)	Ms.Sahana.P.Shankar and Ms.Supriya M S		

Assignment – 1			
Reg.No.		Name of Student	

Sections	Marking Scheme		Marks		
			Max Marks	First Examiner Marks	Moderator
Part A					
	A 1.1	Introduction to the topic	1		
	A 1.2	Importance of requirements engineering	3		
	A 1.3	Conclusion	1		
		Part-A Max Marks	5		
Part B.1					
	B 1.1	Introduction to the project	2		
	B 1.2	Functional requirements specification	3.5		
	B 1.3	Non-Functional requirements specification	3.5		
	B 1.4	Conclusion	1		
		B.1 Max Marks	10		
Part B.2					
	B 2.1	Introduction to the structural design documentation	2		
	B 2.2	User characterization	2		
	B 2.3	Use-case diagram with Use-case specification	5		
	B 2.4	Conclusion	1		
		B.2 Max Marks	10		
Total Assignment Marks			25		

Course Marks Tabulation				
Component-1 (B) Assignment	First Examiner	Remarks	Moderator	Remarks
A				
B.1				
B.2				

Marks (Max 25)				
<div style="display: flex; justify-content: space-between; align-items: flex-end; padding: 10px;"> <div style="width: 45%;">Signature of First Examiner</div> <div style="width: 45%;">Signature of Moderator</div> </div>				

Please note:

1. Documental evidence for all the components/parts of the assessment such as the reports, photographs, laboratory exam / tool tests are required to be attached to the assignment report in a proper order.
2. The First Examiner is required to mark the comments in RED ink and the Second Examiner's comments should be in GREEN ink.
3. The marks for all the questions of the assignment have to be written only in the **Component – CET B: Assignment** table.
4. If the variation between the marks awarded by the first examiner and the second examiner lies within +/- 3 marks, then the marks allotted by the first examiner is considered to be final. If the variation is more than +/- 3 marks then both the examiners should resolve the issue in consultation with the Chairman BoE.

Assignment-1

Term-1

Instructions to students:

1. The assignment consists of 3 questions: Part A – 1 Question, Part B – 2 Questions.
2. Maximum marks is 25.
3. The assignment has to be neatly word processed as per the prescribed format.
4. The maximum number of pages should be restricted to 10.
5. Restrict your report for Part-A to 2 pages only.
6. Restrict your report for Part-B to a maximum of 8 pages.
7. The printed assignment must be submitted to the course leader.
8. **Submission Date: 18/02/2019**
9. **Submission after the due date is not permitted.**
10. **IMPORTANT:** It is essential that all the sources used in preparation of the assignment must be suitably referenced in the text.
11. Marks will be awarded only to the sections and subsections clearly indicated as per the problem statement/exercise/question

Preamble

This course is intended to make the students learn and apply the fundamental concepts, principles, techniques and methodology of creating software. Any software application development involves requirements collection and analysis, high level and low level design, development, software testing, software installation at customer's place and software maintenance. Students are trained in concepts used to design, develop, test and evaluate software based on given requirements. This assignment is framed to make the students evaluate and apply the object oriented and structured approach of software engineering.

Part-A

(05 Marks)

Requirement Engineering is the first phase of software development process. The activity of collection and analysis of requirements plays a vital role in software engineering. Any change in requirements provided by the customer during development of a software affects the quality and timelines of software development. However, changes in requirements of products are common. Changes in requirements may create additional workload for software engineers. The requirements are gathered initially from the customer to be used in the software development process. To measure the success of software, the developed software must meet the requirements given by the user. Change in requirements affect the quality of a product.

In this context, develop an essay on the topic: ***"The requirements engineering phase in Software Development Cycle has an impact on the quality of the product"***.

Your essay should emphasize on:

- A1.1 Introduction to the topic
- A1.2 Importance of requirements engineering in the early stages of software development
- A1.3 Justification with stance taken and conclusion

Part B

(20 Marks)

Scenario: An online reservation system aids in the efficient management of activities such as reservation and cancellation of train, bus, flight and movie tickets, and hotel rooms. You are required to develop an online reservation system in consultation with your course leader:

B.1

(10 Marks)

Analyze the requirements by elicitation, elaboration and negotiation to develop formal requirements specification for the online reservation software. Your report should include the following:

- B1.1 Introduction to the online reservation software
- B1.2 Functional requirements specifications
- B1.3 Non- Functional requirements specifications
- B1.4 Conclusion

B.2

(10 Marks)

Develop the context level design for the online reservation software using Object-Oriented approach with User characterization and Use-case diagrams.

Your report should include the following:

- B2.1 Introduction to the structural design documentation
- B2.2 User characterization
- B2.3 Use-case diagram with Use-case specification
- B2.4 Conclusion