Faculty of Engineering and Technology			
Ramaiah University of Applied Sciences			
Department	Computer Science and Engineering	Programme	B. Tech
Semester/Batch	07/2017		
Course Code	CSC402A	Course Title	Web Architecture and Application development
Course Leader	Mr. Kishore S. M. and Ms.Sahana.P.Shankar		

Assignment			
Register No.		**Name of the Student**	

Sections		**Marking Scheme**	**Marks**		
			Max Marks	**First Examiner Marks**	**Moderator**
Part 1					
	1.1	Functional and non-functional requirements	5		
	1.2	Identification and design of the entity classes using E-R diagrams	5		
	1.3	Design of UML interaction sequence diagrams	5		
	1.4	Design of Algorithm/ Flowchart	5		
		Part- 1 Max Marks	**20**		

Course Marks Tabulation				
Component- CET B Assignment	**First Examiner**	**Remarks**	**Second Examiner**	**Remarks**
1				
2				
Total Marks				

Signature of First Examiner **Signature of Second Examiner**

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.

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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

Instructions to students:

1. The assignment consists of **1** question.
2. Maximum marks is **20**.
3. The assignment has to be neatly word processed as per the prescribed format.
4. The maximum number of pages should be restricted to **9**.
5. The printed assignment must be submitted to the course leader.
6. **Submission Date:** XXXXXXX
7. **Submission after the due date is not permitted.**
8. **IMPORTANT**: It is essential that all the sources used in preparation of the assignment must be suitably referenced in the text.
9. Marks will be awarded only to the sections and subsections clearly indicated as per the problem statement/exercise/question

Preamble:

The course on web architecture and application development is aimed at preparing the students to design, develop and test web applications by applying different programming techniques. The students are taught the overview of software architecture and architectural styles. They apply different web technologies to design and develop web applications. They also analyze different software architectures, their benefits and shortcomings. This assignment assesses how well a student can analyze the scenario, design a well-defined user interface for the web application and implement the same. The first part of the assignment is aimed at assessing the student's ability to design a web application. The second part of the assignment is aimed at assessing the student's ability to implement an efficient web application.

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Scenario: **(20 Marks)**

In an online Sport accessories shopping Web application, users can register and login to the web application. The online Sport accessories web application maintains account details for each user (user ID, user name, phone number, shipping address and items purchased etc.). The user may select any item from the list of available accessories or can search for all the available Sport accessories. It is assumed that an accessory purchased is reserved and made available to the user offline.

Answer the following questions:

1. **(20 Marks)**

List all the functional and non-functional requirements for the given scenario. Identify and design entity classes using E-R diagrams and UML sequence diagrams. Document the following in the report:

1.1 Functional and non-functional requirements

1.2 Identification and design of the entity classes using E-R diagrams

1.3 Design of UML interaction sequence diagrams

1.4 Design of Algorithm/ Flowchart