

	King Saud University College of Computer and Information Sciences Computer Science Department		
	Course Code:	CSC 342	
	Course Title:	Software Engineering	
	Semester: 2	Spring 2015	
		Solution of Midterm 2	2 h
Student Name:		
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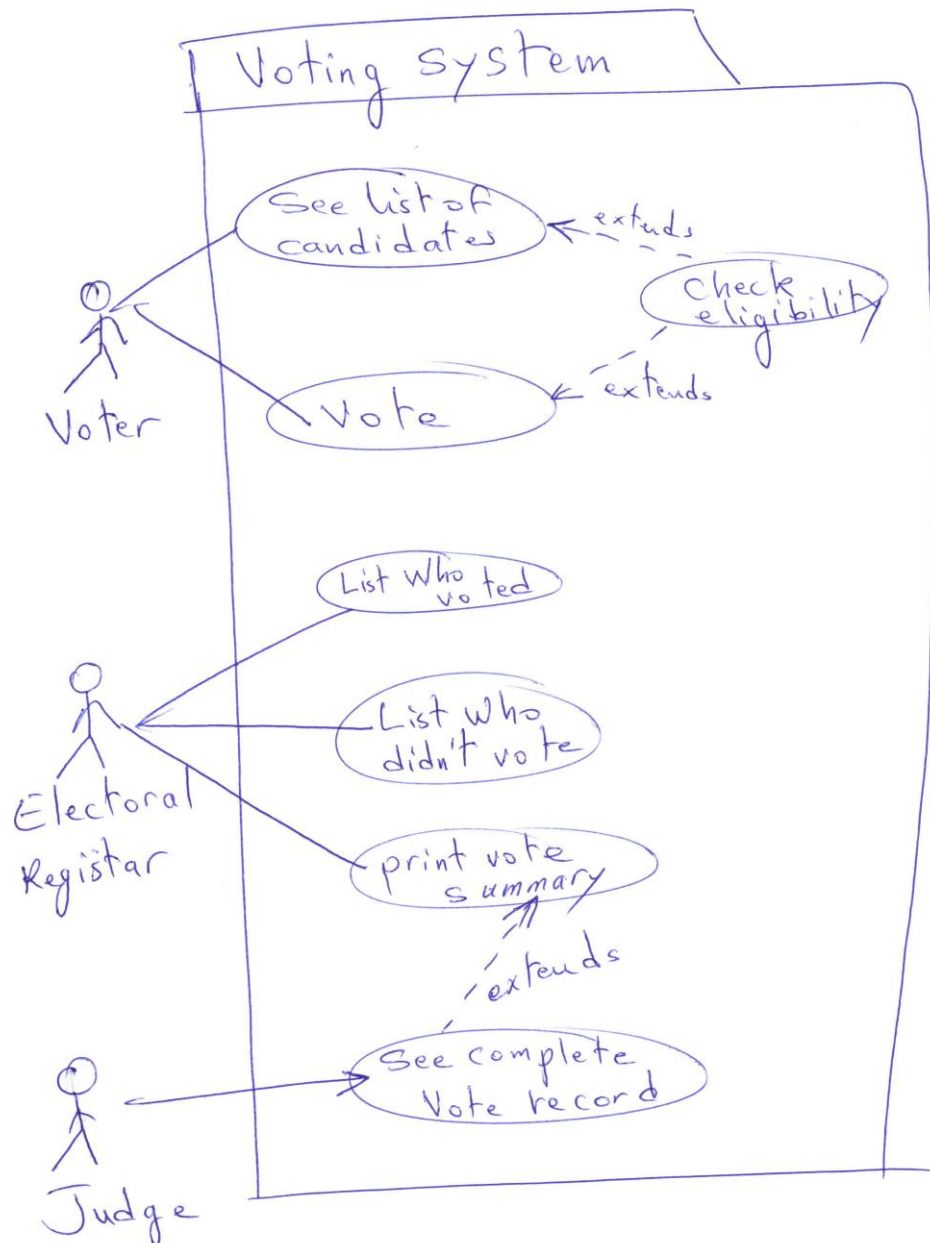
Exercise 1: Circle the Correct Answer(s). (5 points)

- Which of the following statement is FALSE about use cases?
 - Use case can be used for product testing.
 - A use case is an interaction between a user and a system.
 - Use cases describe the structure of the system.
 - Use cases provide the basis of communication between clients and developers in early phase.
- What is a Domain Model?
 - illustrates meaningful conceptual classes in problem domain
 - describes the behavioral model and the implementation model
 - represents real-world concepts, not software components
 - implementation model and environmental model
- Which of the following UML diagrams describe the behavioral views
 - Sequence diagrams
 - Class diagrams
 - Collaboration diagrams
 - Statecharts
 - Use case diagrams
 - Activity diagrams
- Which of the following UML diagrams describe the static views
 - Sequence diagrams
 - Class diagrams
 - Collaboration diagrams
 - Statecharts
 - Use case diagrams
 - Activity diagrams

Exercise 2: (7 points)

Draw a Use Case Diagram for a voting machine, on which voters can see a list of candidates and select one to vote for. The machine should check that each voter is eligible to vote. The electoral registrar will also want to print a summary of the total votes for each candidate, and (separately) a list of the voters who have voted, and a list of those who haven't. In case of a dispute, the machine should also list a complete record of who voted for whom, but only a judge can use this function.

Answer:



Exercise 3: (13 points)

Draw a UML Class Diagram representing the following elements from the problem domain for a volleyball league. A volleyball league is made up of at least four volleyball teams. Each volleyball team is composed of six to twelve players, and one player captains the team.

A team has a name and a record. Players have a number and a position. Volleyball teams play games against each other. Each game has a score and a location. Teams are led by a coach. A coach has a level of accreditation and a number of years of experience, and can coach only one team. Coaches and players are people, and people have names and addresses.

Draw a class diagram for the description above. Make sure to show attributes, multiplicities and aggregations/compositions, inheritance where appropriate. No need to show any operations.

Answer:

