Chongqing University of Technology
MD. Anowar Hossain (an hao ming)
ID: 6201701008 4

Ans to the Question no. 1

1.1 c
1.2 d
1.3 d
1.4 a
1.5 d
1.6 d
1.7 a
1.8 c
1.9 d
1.10 b

Ans to the Q no. 2

True / False

1. True
2. True
3. False
4. True
5. True
6. True
7. True
8. False
9. True
10. False

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Ans to the question no. 3

(1) Suppose you are working as follows engineer.

the most important characteristic of my software is: maintainability dependability security efficiency and acceptability are most important characteristic in a company for a software engineer.

(2) There is a fundamental difference between the user and the system requirements that mean that they should be considered seperately.

a. the user requirements are intended to describe the systems function and features from a user perspective and it is essential that users understant this requirements.

the should be expressed in natural. language and may not be expressed in great deal; to allow some implementation

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flexibility. the people involved in the process must be able to understand the users environment and application domain.

b. the system requirements are much more detailed than the user requirments and are intended to be a precise specification of the system that may be a part of a system contanct. they may also be used in situations where development is outstanded and the development is need a complete specificitation of what should be developedment. the system requirements are dveloped after user requirements have been established.

(2) Collaboration diagram are used to sow how objects itenact to perform the behavion of a penticular use case or a part of use case. Along with sequence diagrams collaboration are used by desigron to define and clearly the

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objects that perform a particular flow of events of a use case.

the purpose of collaboration Diagram unlike a sequence diagram a collaboration diagram shows the relationship among the objects. sequences diagram and collaboration digarams express similar information. but show in the different was

* model collaborations between object and roles that deliver the functionalities of use cases and operations.

* model mechanisms withing the architetural design of the system

* support the Indentification of object that participate in use case.

* Each massage in a collaboration diagram has a sequence number.

* capture interactions that show the massage passing between objects and roles withn the collaboration.

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4 Ans to the Question no. 4

Requirement Engineering is the process of defining, documenting and Maintaining the requirements.

i. Requirements elicitation
ii. Requirements specification
iii. Requirements verification and validation
iv. Requirements management.

- Requirements Elicition: It is related to the various ways used to gain knowledge about the project domain and requirements.
- Requirements specification: This activity is used to produce formal software requirement models.
- Requirements verification and validation:
  verification: It refers to the set of tasks that ensures the the software that is build is traceable
  validation: If refers to a different set of tasks that ensures that the software that has build is traceable to customer requirements.
- Requirements management:
  Requirement management is the process of analyzing, documenting, tracing, prioritizing and agreeing on the requirement and controlling the communication to relevent stockholders

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5. in Extreme programming, requirements are expressed as scenarios which are implemented directly as a series of task

Advantages and disadvantages of Extreme programming user requirements

Advantages

1. Scenarios cope with most of common operation. it is easy to identify what type of operation that is required in the users stories.

2. customer focus in the scenario and increase the chance that the software produced will actually meet the needs of the users.

Disadvantage:

1. using scenarios on a end can bring to a function overlooked on omission which which can be a time-consuming process to complete the system.

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2. Two different scenario can lead to the same function as it will be conflicted each other. erasing out redundant scenarios can be a cumbersome tasks.

6 Replacing a legacy system is a risky business strategy for a number of reasons there is rarely a complete specification of the legacy system. the original specification may have been lost. If a specification exists it is unlikely that incorporates details of all of the system changes that have been made. It may not be delivered on time and for the prime Expected.

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Ans to the Question no- 7

The software dependability is important in most sociotechnical systems for following reasons:

- To avoid the introduction of accidental errors into the system during software specification and development.
- To design verification and validation process that are effective in discovering residual errors that affect the dependability of the system.
- To configure the deployed system and it's supporting software correctly for its operating environment.
- System failure costs may be enormous.
- Users often reject systems that are unreliable, unsafe or insecure.

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Ans to the Question no - 8

Sr No.	Key	Association	Aggregation
1	Definition	Association refers to "has a" relationship between two classes which use each other.	Aggregation refers to "has a" relation-ship between two classes where one contains the collection of other class objects.
2	Flexibility	Inflexible in nature.	Flexible in nature.
3	Linkage	Linkage is needed to maintain association.	Linkage between objects is not mandatory.
	UML	Lines are used to represent association	Diamond shap next to assembly class is used to represent the aggregation relationship

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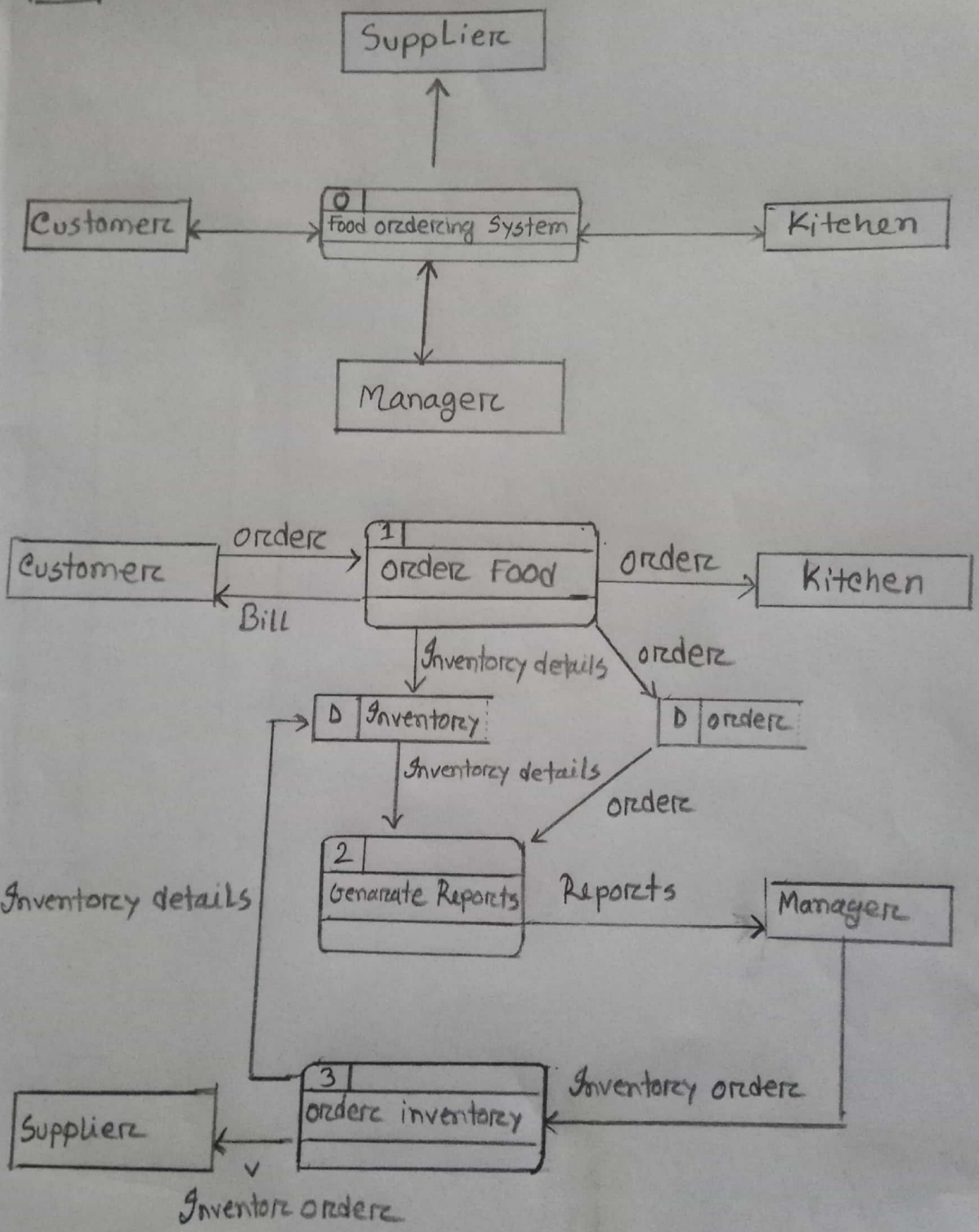
Ans: to the qu: No:- 4

4.1



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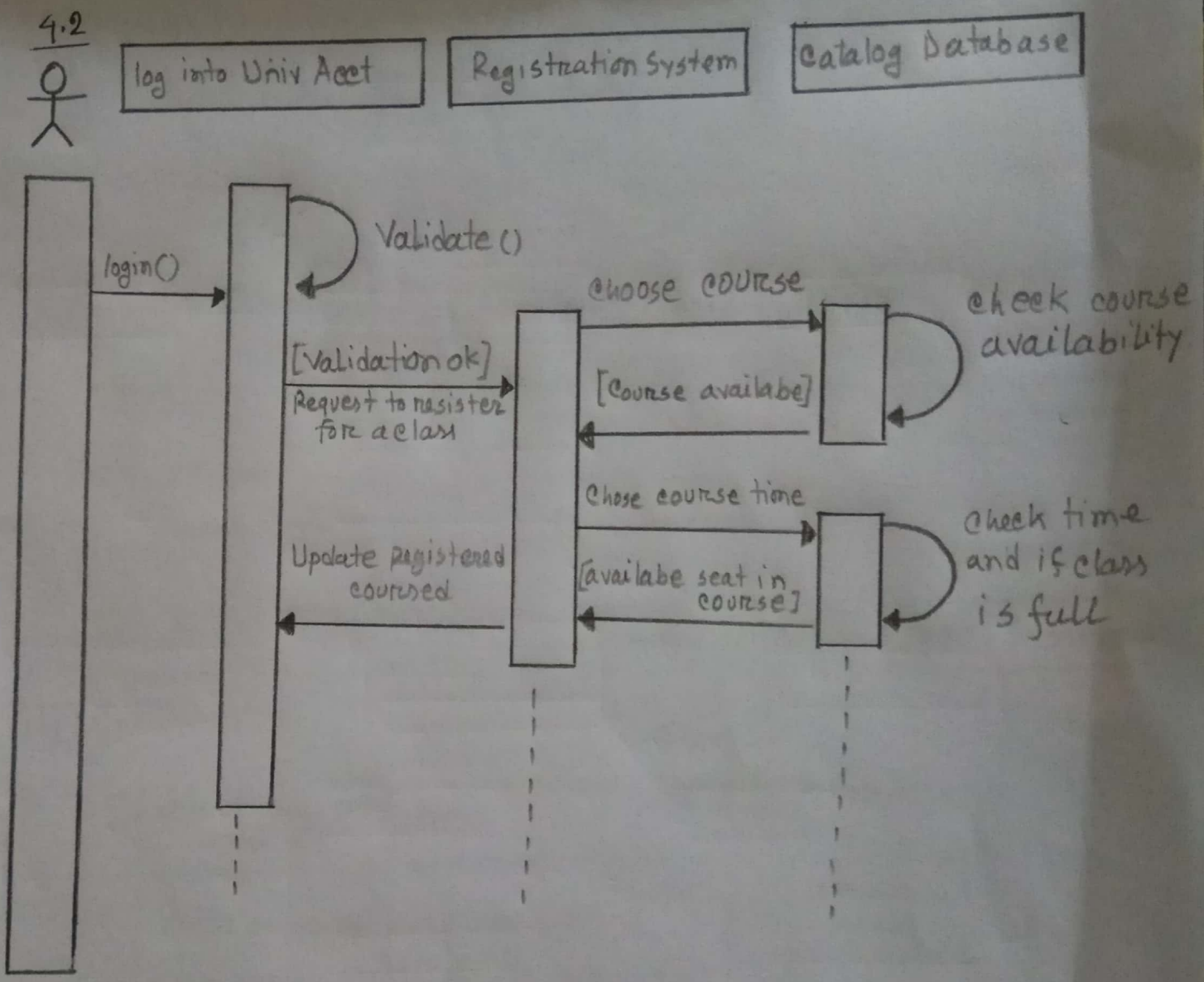
Ans: to the Question No: 4(4.2)

4.2



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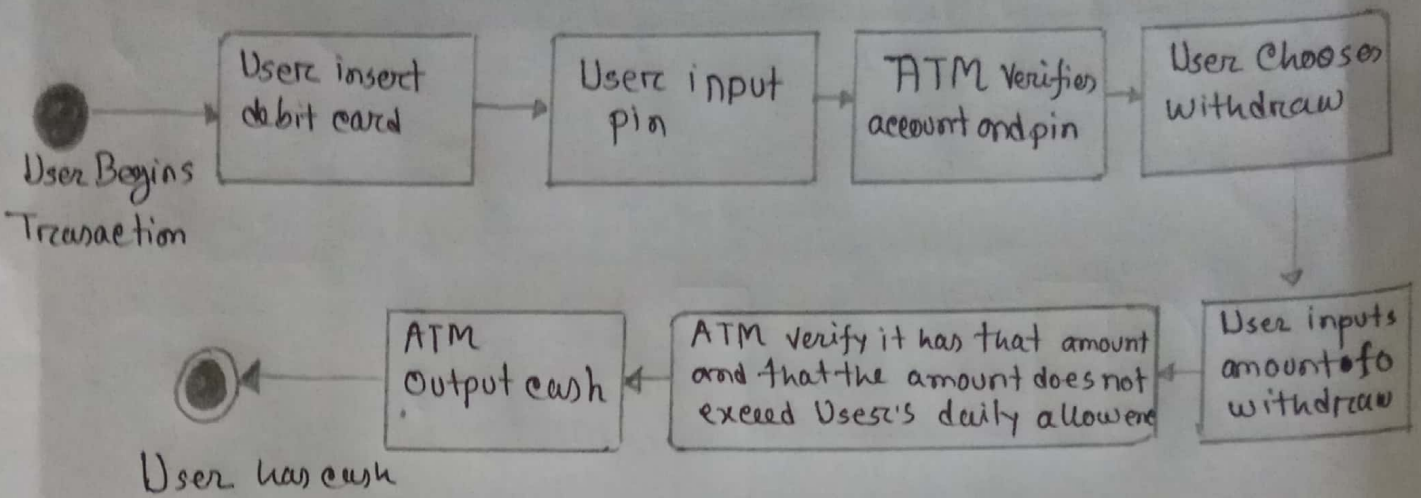
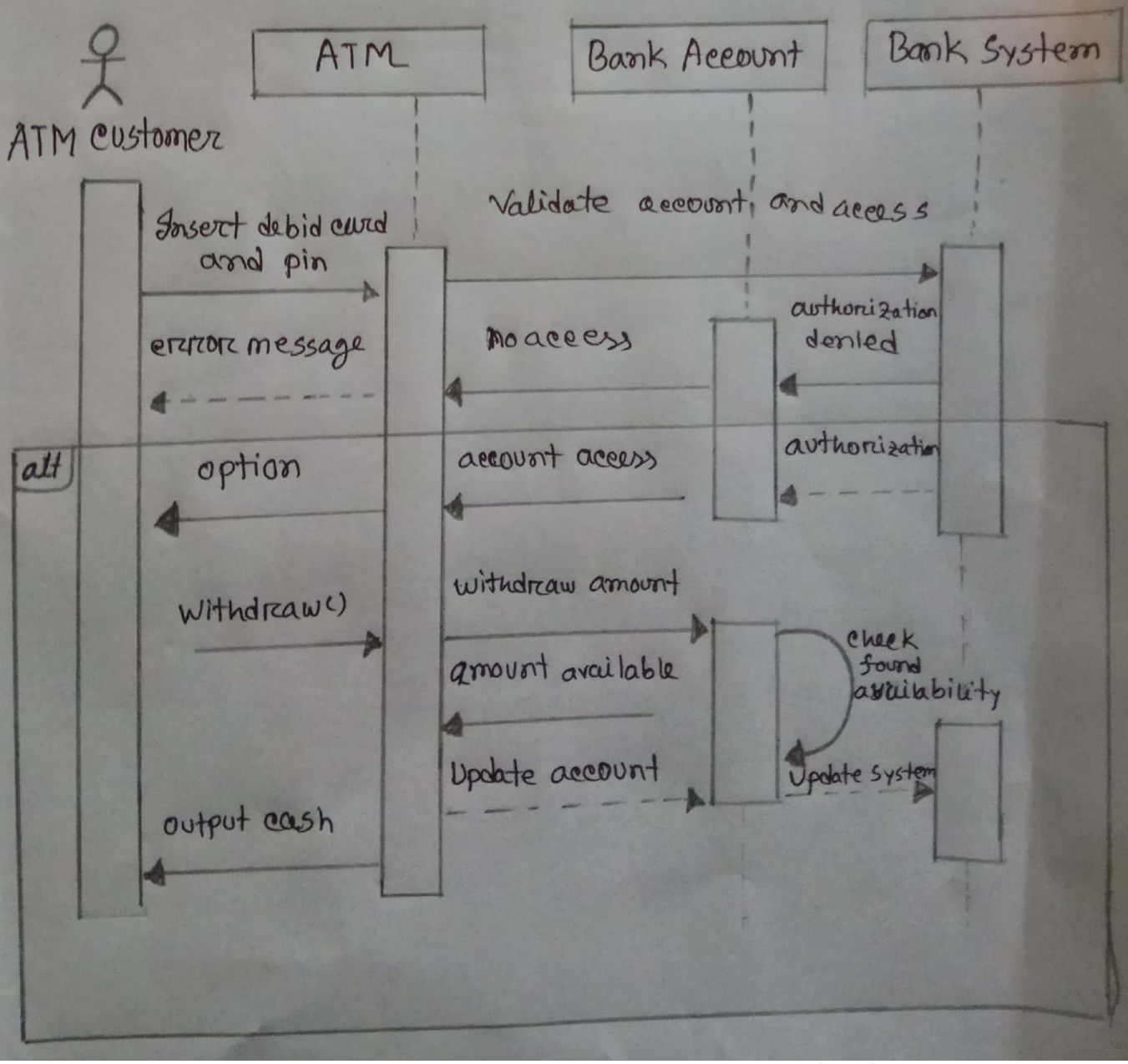
4.3





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