

Mid Term Examination

Question No. 1

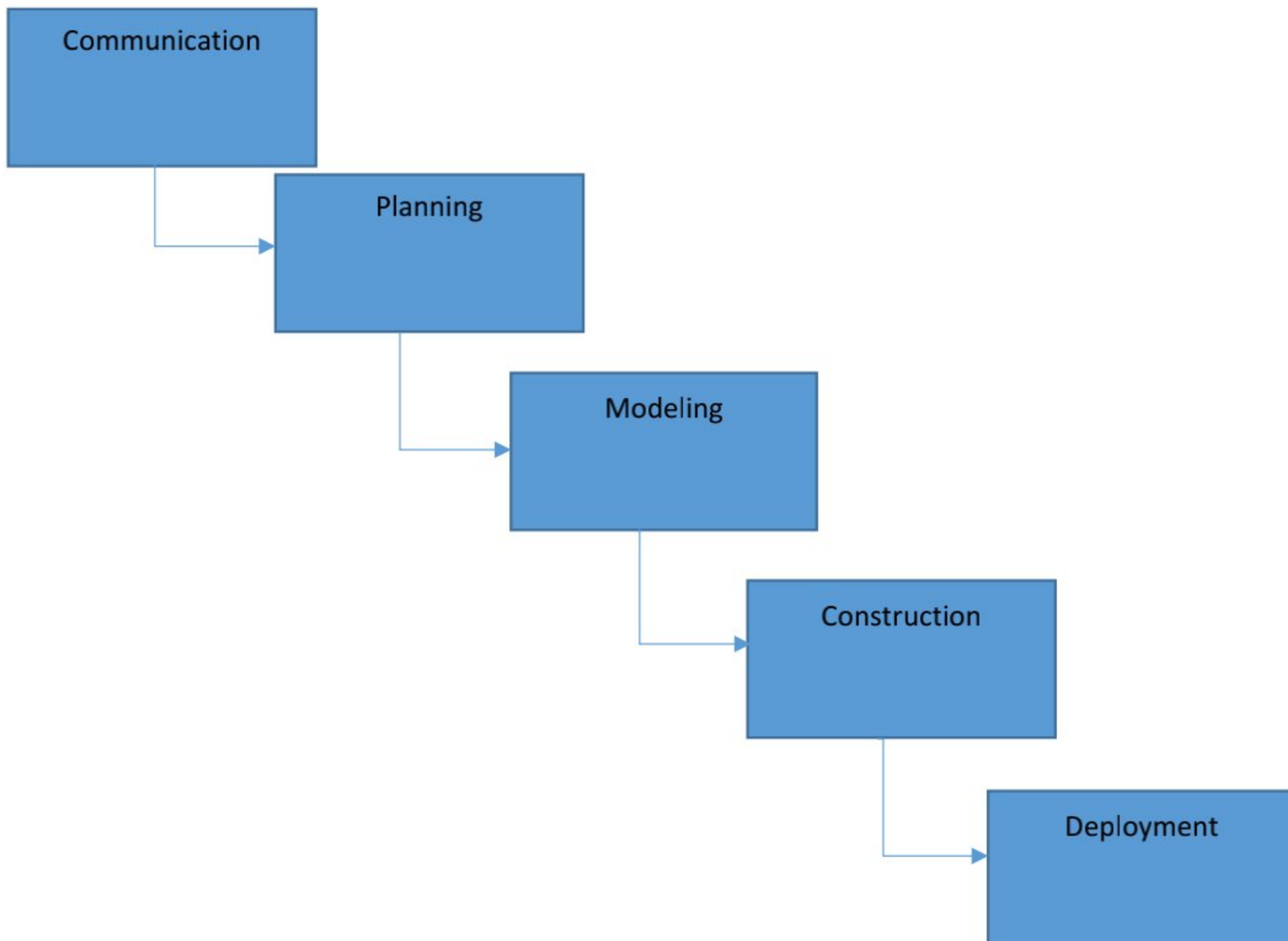
Waterfall Model:

Water Fall Model is a model used in System Development Life Cycle to create a system with linear and sequential approach. It is named as due to its flow of development in downward fashion like water fall.

The model is divided in different phases and the output of one phase is used as input of following phase.

Phases:

- Communication
- Planning
- Modeling
- Construction
- Deployment



Advantages:

1. Forces structured and disciplined organization.
2. It is simple to understand, follow and arrange task.
3. Allows for early design and specification changes can be made easily.

Disadvantages:

1. Design is not adaptive, in case of any flaw the whole process need to be start over.
2. Does not consider error correction.
3. Reduces efficiency by not allowing processes to overlap.

Question No. 5

Online Bike Racing game

Non-Functional Requirements:

1. The user must experience a strong and attractive environment.
2. The game must be fun.
3. The game must be atmospheric.
4. The game must not crash.
5. The game must be efficient.
6. The game must be accessible for all user segments.
7. Good performance.

Online Banking System

Non-Functional Requirements:

1. There must be security assurance to the user.
 2. Good Performance.
 3. Usability must be frequent.
 4. Availability to user.
 5. No permission to unauthorized access to data of user.
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Question No. 2

Software development Life Cycle (SDLC):

The stages of SDLC are as follows:

- Requirement Analysis
- Requirement Definition
- Designing
- Coding
- Testing
- Deployment
- Maintenance

Requirement Analysis:

Planning for quality assurance requirements and identification of the risks associated with the project.

Defining Requirements:

Clearly define the document, requirements and get them approved by the customer which is done through SRS – Software Requirement Specification document.

System Designing:

All the features and operation in detail are specified in DDS – Design Document Specification including screen layouts, process diagrams and documentation.

Coding and Development:

In this stage the product is built and the code is generated according to DDS.

Testing the product:

In this stage the product is tested where any defects are tracked, fixed and then retested assuring the quality standards as in SRS.

Deployment of product:

Once the product is tested it is ready to be deployed in the market.

Maintenance:

Any changes, corrections, addition and many more are continued during rest of software's cycle.

Question No. 3

User Level Requirements:

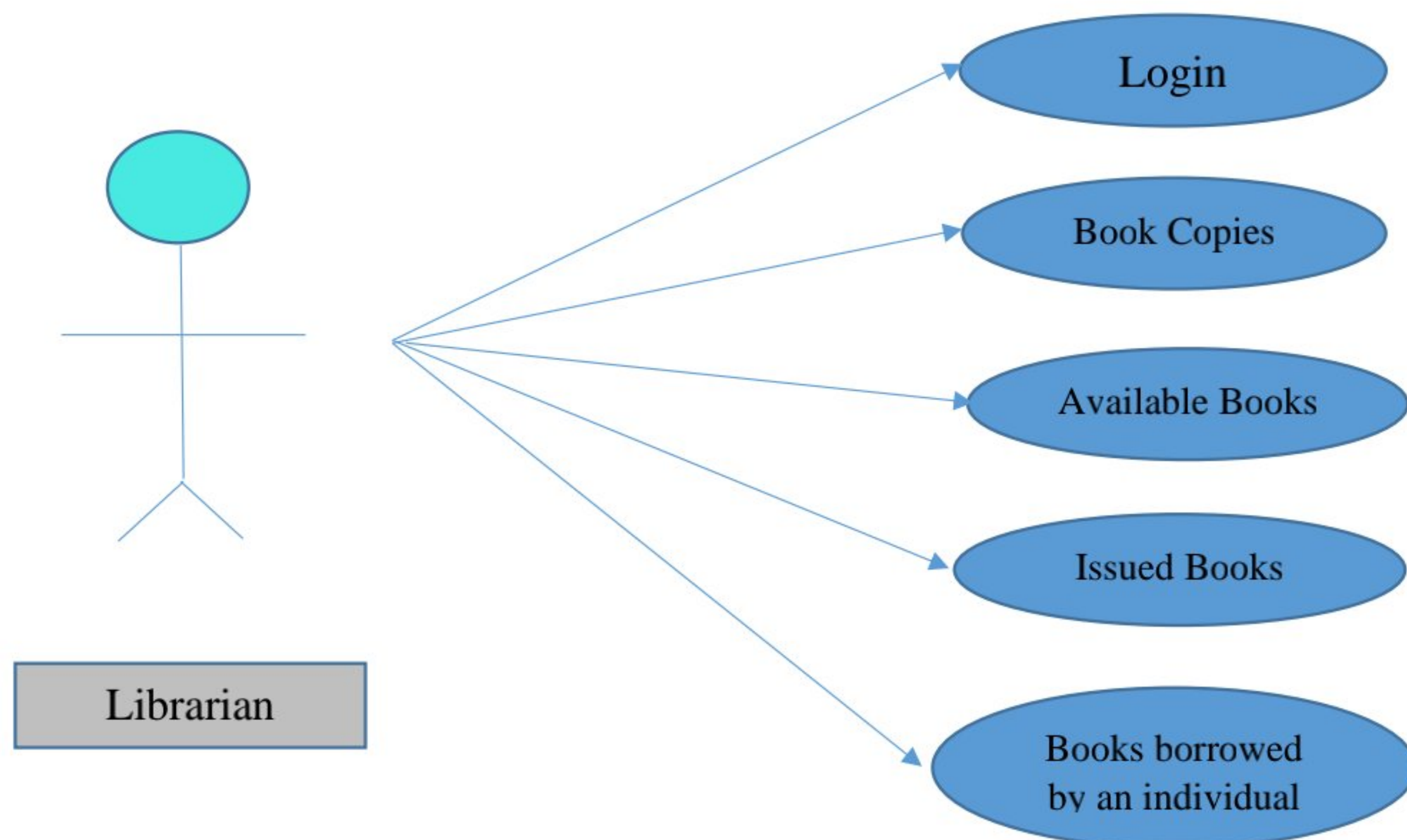
Portal in access to user where user can enter and save all the details of borrower and track all books in stack.

System level Requirements:

1. Id of borrower must be mentioned.
 2. The book must be identified weather it is available or borrowed.
 3. Time conducted i.e., for how long a book can be borrowed.
 4. Book must have an ISBN.
 5. Copies of the book must be identified with copy number.
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Question No. 4

Use Case Diagram:



Domain Model:

