# Software Engineering Assignment

## MODULE:1(SDLC)

- **What is software? What is software engineering?**

- Software is a set of instructions, data or program used to operate computers and execute specific tasks. Software is a generic term used to refer to applications, scripts and programs that run on a device.
- These programs are designed to run a computer applications program and hardware.
- The five types of applications software are applications software, system software, driver software, middleware software and programming software.
- Applications software is mostly in installed in device. System software is inbuild in software. Driver software is used for audios and videos. Middleware software is mediating between hardware and software. programming software is used for write a code.

- **Explains types of software**

1.System software

2.Application software

3.Driver software

4.Middleware software

5.Programming software

**1.System software:** system software is mainly designed for managing system and run independently.it is used to write a low-level programming. And OS is the best example of system software.

**2.Application software**: application software is a computer software package that run function for user. It self-contains program.

**3.Driver software:** driver software also known as a device driver. It controls the device and enabling them to perform their specific tasks. Driver software is communicated with the device. And hardware dependent and operating system specific.

**4.middleware software:** it is a software that mediates between application and system software. For example, middleware enables Microsoft windows to talk to word.

**5.Programming software:** it is a set of programs which help the software developers by giving them in creating, debugging and maintaining other programs and applications. And used to write a code.

- **What is SDLC? Explain each phase of SDLC**
  SDLC is a structure that imposed the software product that defined the process for planning, analysis, designing, implementation, testing and maintenance.

➢ There are six phases of SDLC

1. **Requirement collection**
2. **Analysis**
3. **Designing**
4. **Implementations**
5. **Testing**
6. **Maintenance**

**1.requirement collection:** it is processing that requirement gathering and identify your project to start to end. This process is understanding what you are trying to build and why you are building it.

**2.Analysis:** analysis is very important throughout any software development process. And plays a significant determining factor in the success of any software project in terms of usefulness and delivery within established constraints and based on how it is performed.

**3.designing:** it designs lay out of page or application. This mechanism transforms a data to some suitable form, which helps a coding. The design is representing a client's data.

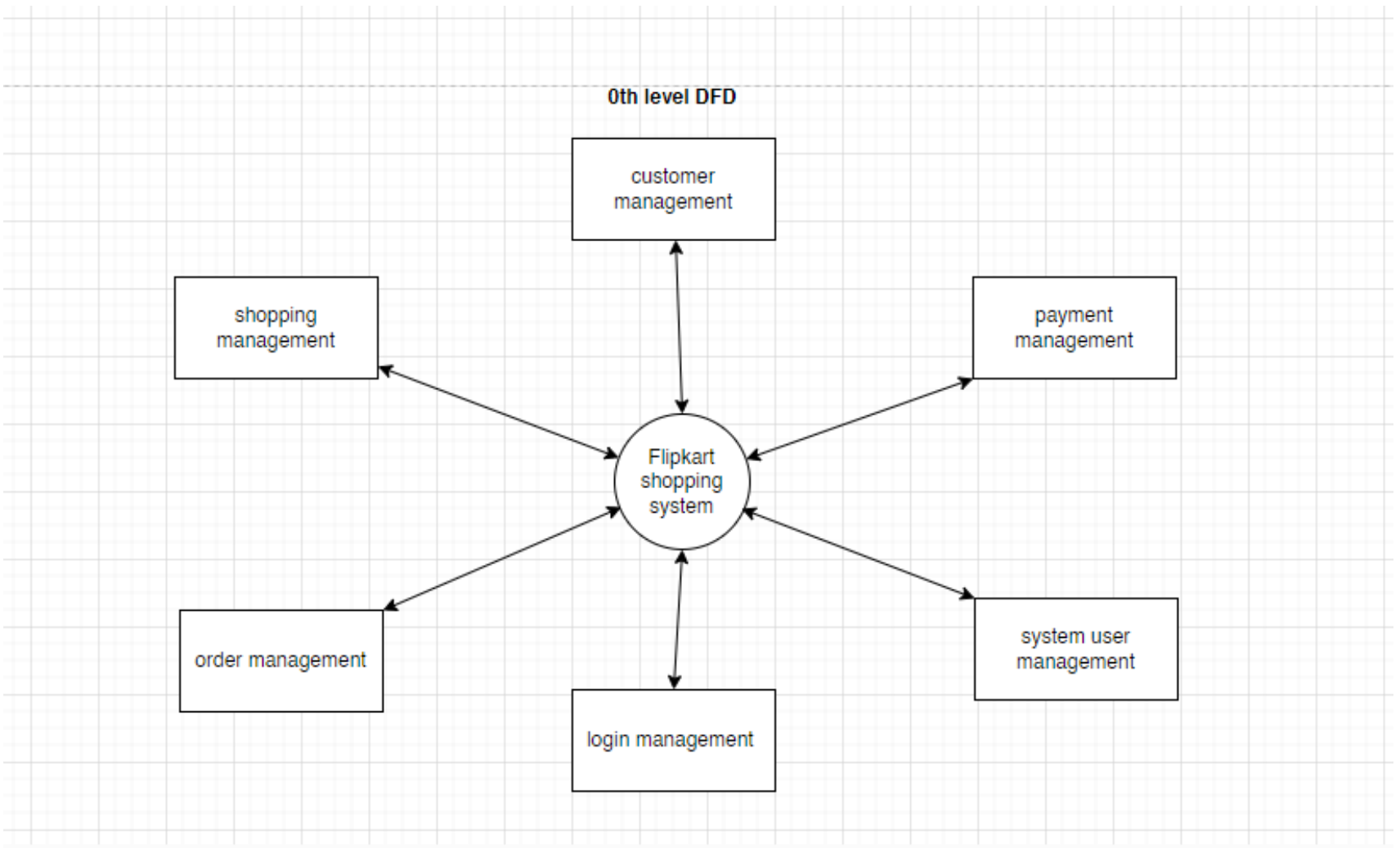
**4.implementaion:** translating the data and design into system software. And after developers use tools and programming languages to build the code.

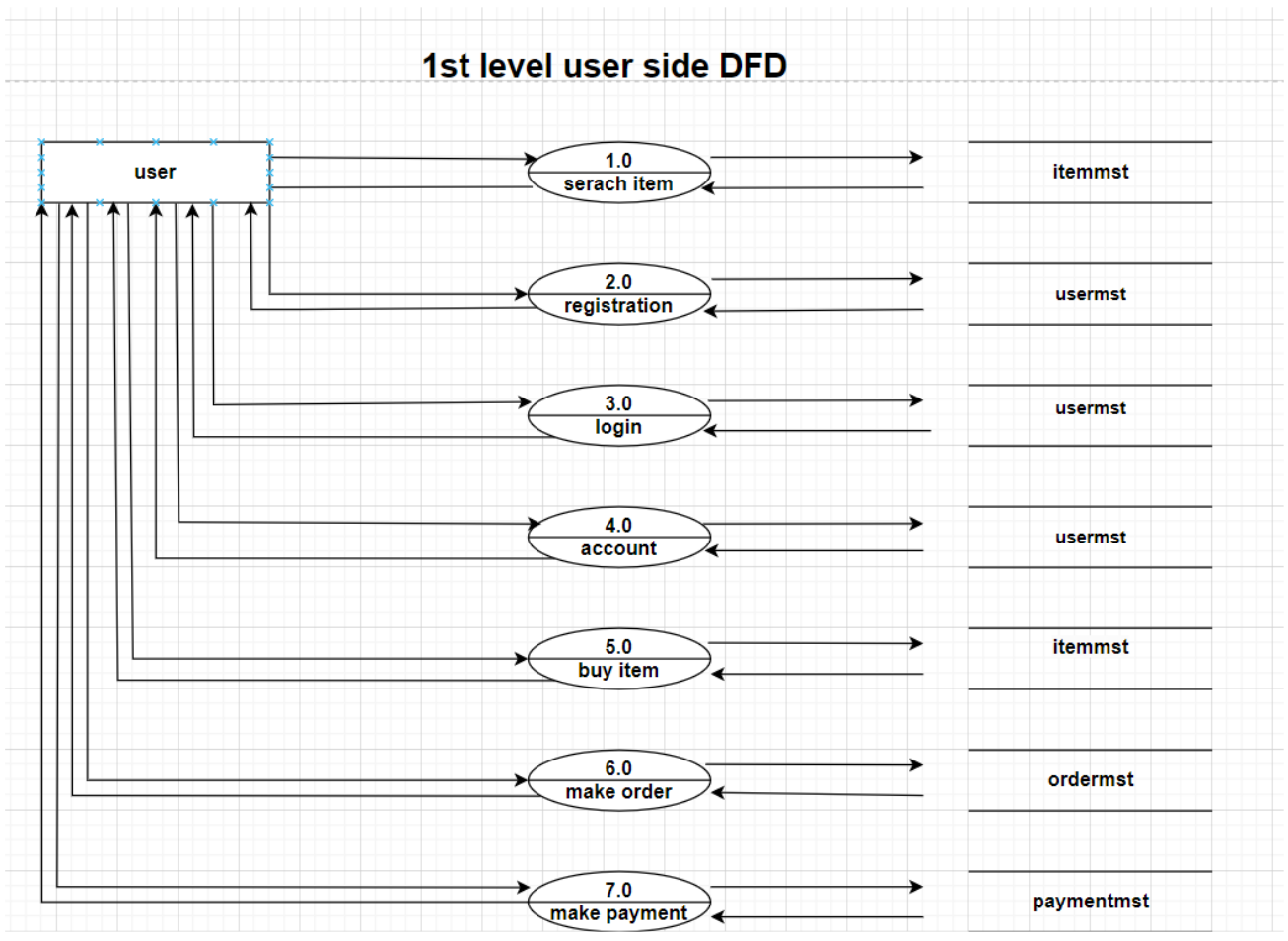
**5.testing:** in this phase developers tests a software and find a errors and deficiencies. Testing is also known as a quality assurance.

**6.maintenance:** if tester finding a debug from project, they return to the developers and then he resolving debug and implement correct code and send to a tester.

- **What is DFD? Create a DFD diagram on Flipkart**

➢ DFD means 'data flow diagram' and also known as a 'bubble chart' through we can represent the flow or data graphically on an information system by using DFD
It describes how data is processed in a system in terms of input and output.


0th level DFD
customer management
shopping management
payment management
Flipkart shopping system
order management
system user management
login management

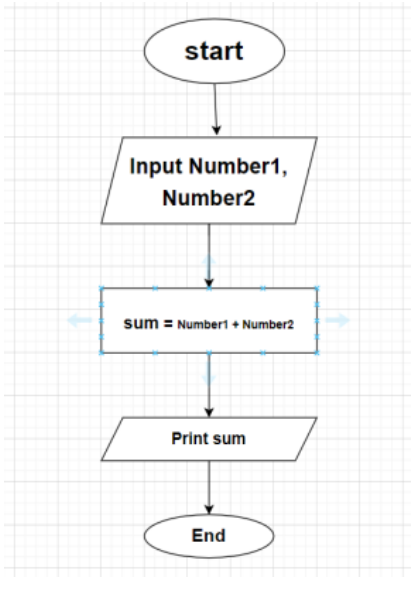

1st level user side DFD
user
1.0 serach item
2.0 registration
3.0 login
4.0 account
5.0 buy item
6.0 make order
7.0 make payment
itemmst
usermst
usermst
usermst
itemmst
ordermst
paymentmst

- **What is Flow chart? create a flowchart to make addition of two numbers.**

  A flow chart is a picture of the separate of a process in sequential order.it is a generic tool that can be adapted for a wide variety of purpose and used a various process.

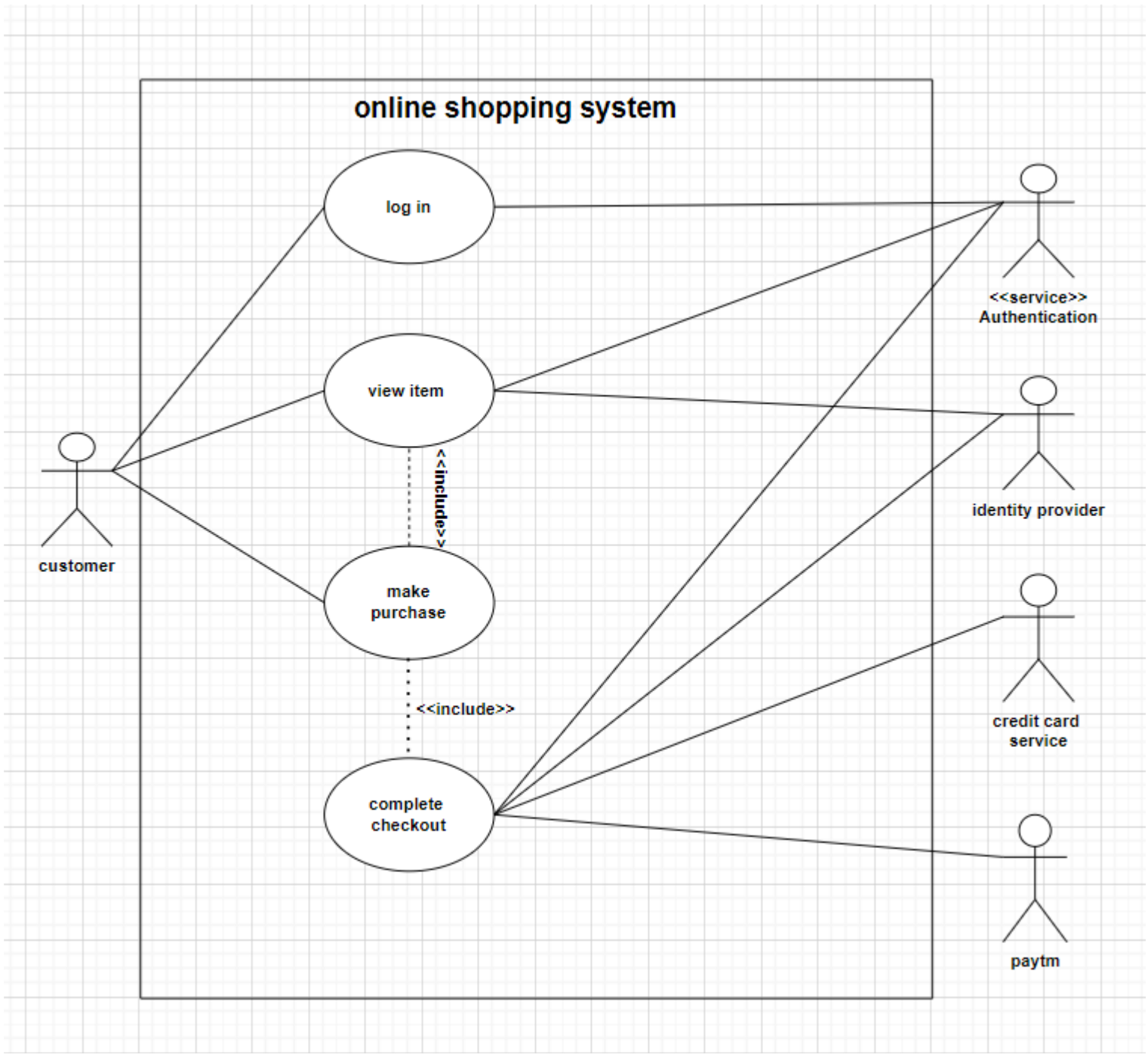
  Flow chart is used to develop understanding of how a process is done and communicate to other how a process is done.

**Flow chart of addition of two numbers.**




- **What is use case Diagram? Create a use case on bill payment on Paytm.**

  A use case diagram is graphical depiction of a user's possible interactions with a system.it shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses. The actor is often shown as stick figures.




# Use case diagram