# Week 13: Software documentation- Program development

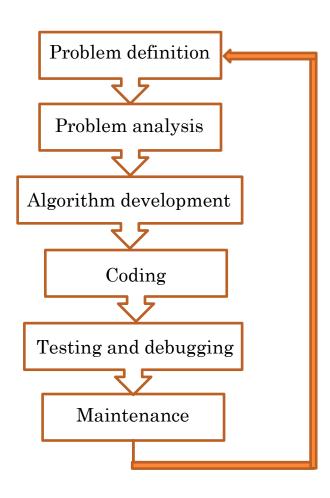




# Learning objectives



□ Documentation at various stages of program development cycle



## Let's reanalyze the project work you completed



# Problem definition:

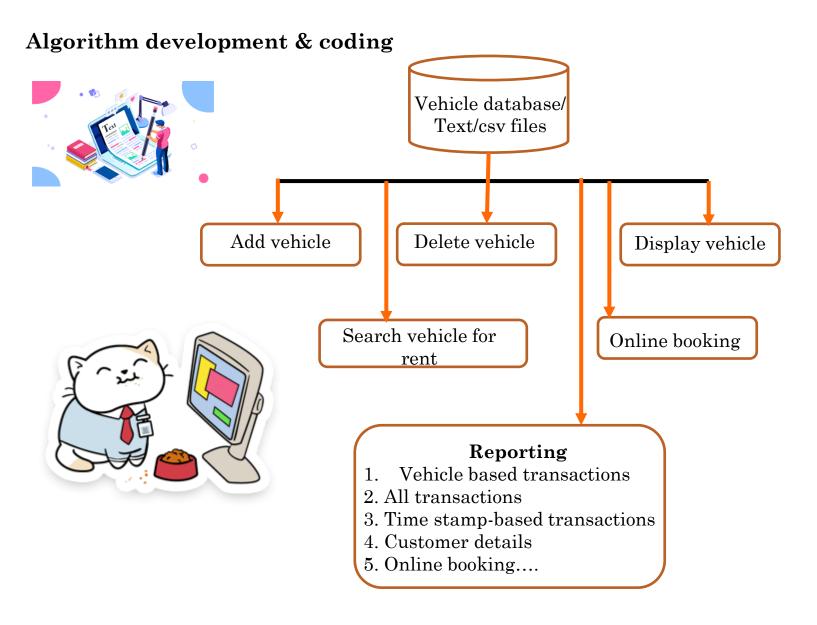
XYZ company is a small business that rents different type vehicles for its customers. It maintains all its business-related transactions in a computer that includes rental details, vehicle info, and financial things but using different applications. In addition, the company wants its customers to book the vehicle online but there is no such application to do so and mostly relies on emails and phone calls.

#### **Problem analysis:**

List the issues that exist in XYZ car rental company as a problem analyzer or solution provider?

#### **Objectives:**

Developing an application/system that handle all type of transactions including vehicle info, rent details, transactions and reporting based on user needs.



What else to be added in the application for XYZ company? Refer objectives/ list of company needs documented earlier.

### Testing and debugging



#### What is testing?

It is a formal process that involves running the programs in the computer by using different type of testing procedures.

The purpose of this process is to make sure that the developed application works according to the specifications/requirements defined in the algorithm development or user needs.

Example: unit test→ is display available cars option working?

- Is a Marking guide given in the project work kind of testing tool?
- How did you test your project work of this course before submission?

#### What is debugging?

It comes after testing immediately if any of the testing procedures return with errors/bugs.

Example: My code is correct but there is an error in data in the text file. So



#### Maintenance in software application development



Once the software is developed, tested and debugged it should be always under vigilance in case if the program breaks due to unavoidable reasons.

Example: My project work is working fine now. Can data visualization be included now but not disturbing the current functions?



Hold on, where do we execute documentation here?





What is your views on improving the project work you completed or Issues your found that should be addressed in future?