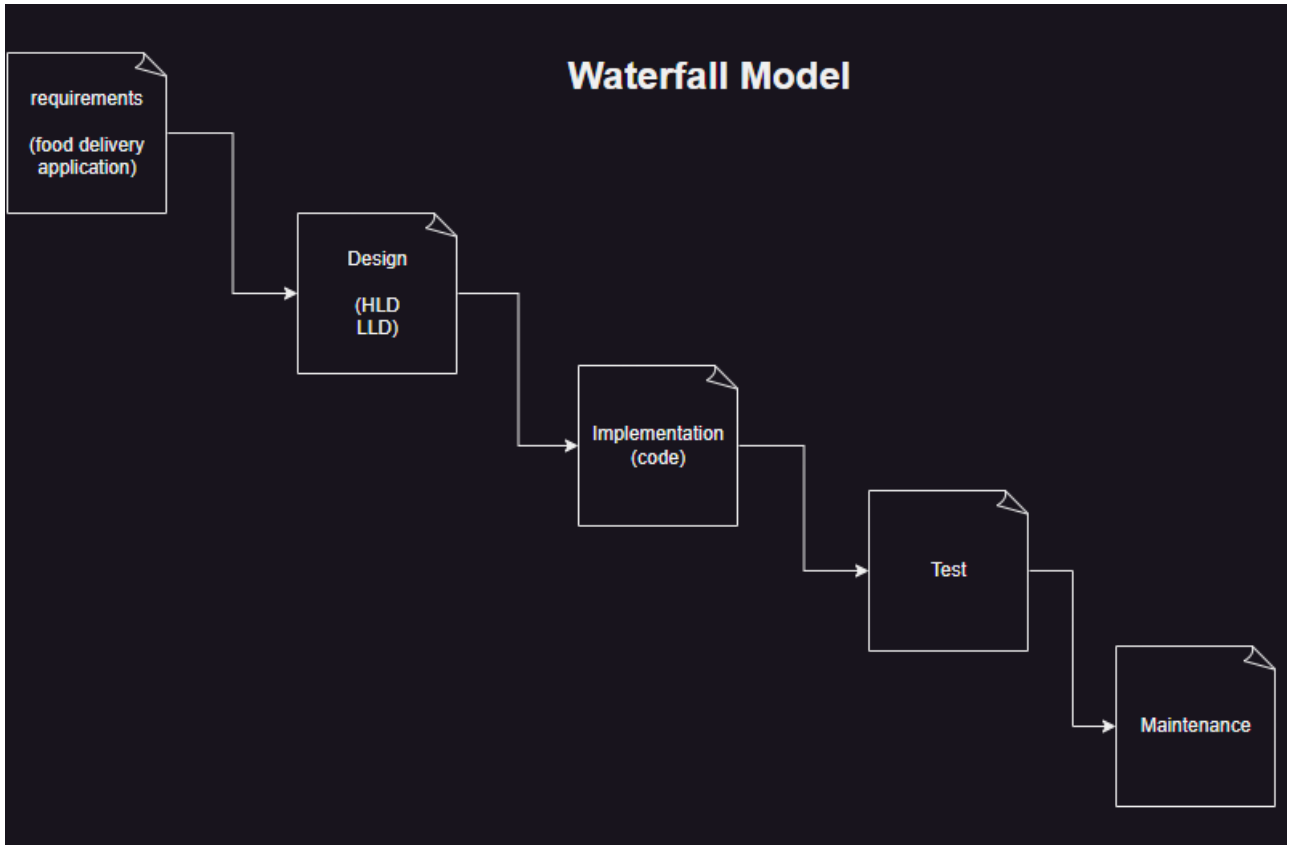
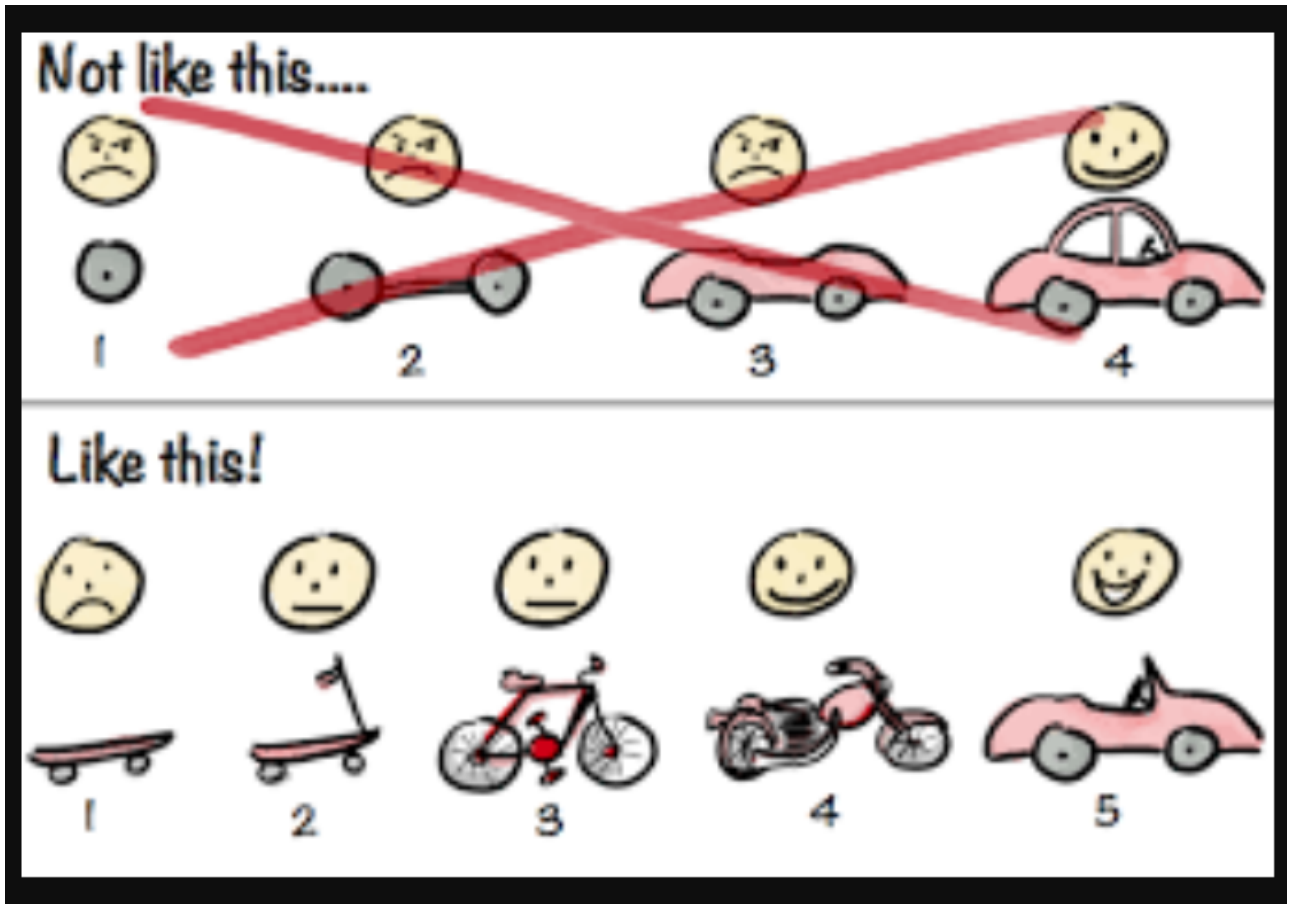


# Understanding CI/CD Pipelines


- Waterfall models



- Agile based MVP (Minimum viable product)



<b>INDIVIDUALS AND INTERACTIONS</b>	<b>OVER</b>	<b>PROCESSES AND TOOLS</b>
<b>WORKING SOFTWARE</b>	<b>OVER</b>	<b>COMPREHENSIVE DOCUMENTATION</b>
<b>CUSTOMER COLLABORATION</b>	<b>OVER</b>	<b>CONTRACT NEGOTIATION</b>
<b>RESPONDING TO CHANGE</b>	<b>OVER</b>	<b>FOLLOWING A PLAN</b>

- For Agile Based Project Developments we have shorter release cycles (sprints) which range from (1 day to 1 month). This requires different set of roles and tools.
- Roles:
  - Product Owner:
    - He creates a Product Backlog describing what is required to finish the project.
  - Scrum Master:
    - Ensure project is running smoothly
    - Arrange meetings
    - Solving issues
  - Team Member
- Agile Meetings:
  - Sprint Kickoff meeting:
    - This is done at the beginning of sprint
    - Create a sprint backlog with tasks
    - Each task should not be taking more than 16 hours
  - Standup meeting:
    - This occurs every day with max time limit of 15 minutes
    - We would work on scrum board Preview
  - sprint demo:
    - each team member will demonstare the activities they have done.
    - At the end of sprint
  - Sprint Retrospective:
    - At the end of sprint where we discuss on
      - what went well
      - what didnt go as planned
      - What are improvements
- There is a need for softwares to track work
  - Jira

- Rally
- Azure DevOps
- We also need
  - CI/CD Engines
  - Test Management
  - Artifact Management
  - Document Repository
  - Version control system
- A software which gives all of below is called as ALM (Application Lifecycle Management)
  - Agile Management
  - CI/CD Engines
  - Test Management
  - Artifact Management
  - Document Repository
  - Version control system
- JIRA from Atlassian and Azure DevOps are popular tools in this area.

## Azure DevOps

- Collaborate on software development through source control, work tracking, and continuous integration and delivery, both on-premises and in the cloud!
- Note: For searching new terms [Refer Here](#)