#### Software Project

A presentation by Er. Akash Pushp

#### What is a Project?

A software project is the complete procedure of software development from requirement gathering to testing and maintenance, carried out according to the execution methodologies, in a specified period of time to achieve intended software product.

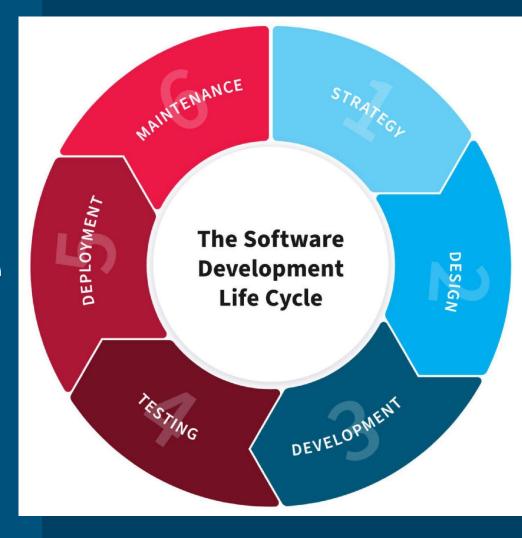
Software Projects traditionally follow the Software Development Life Cycle.

#### Why we need a Project?

Today, It's not only necessary to have understanding about concepts but also you must have working skills to show that you are able to build something in real work environment. That's why we need a project so that recruiter can see that you are able to work on a real work project.

# Tools & Technologies needed to build a Project

- Code editor
- system
- GUI
- OS
- Support software
- Compiler
- Debugger
- Database
- Network
- Internet



#### Phases

- 1. Strategy
- 2. Design
- 3. Development
- 4. Testing
- 5. Deployment
- 6. Maintenance

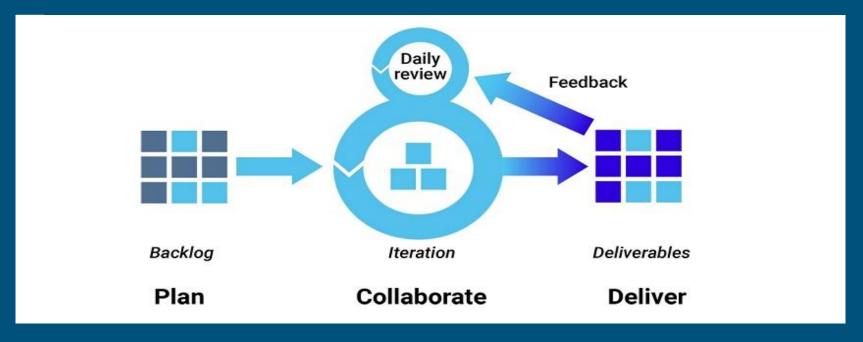
#### Models

- 1. Waterfall Model
- Iteration Model
- 3. V-shaped Model
- 4. Spiral Model
- Extreme Programming Model

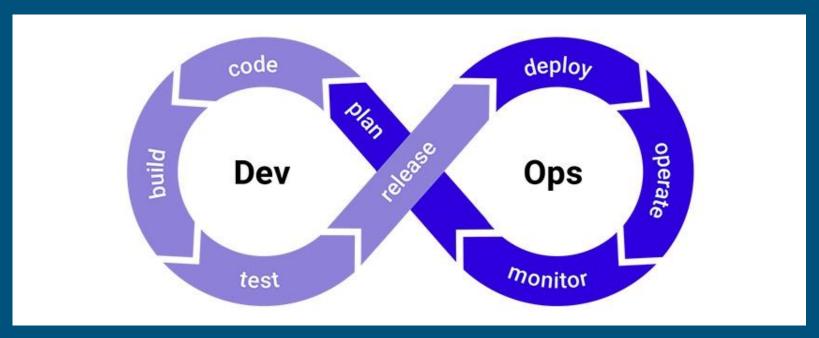
#### Methodologies

- Agile
- DevOps

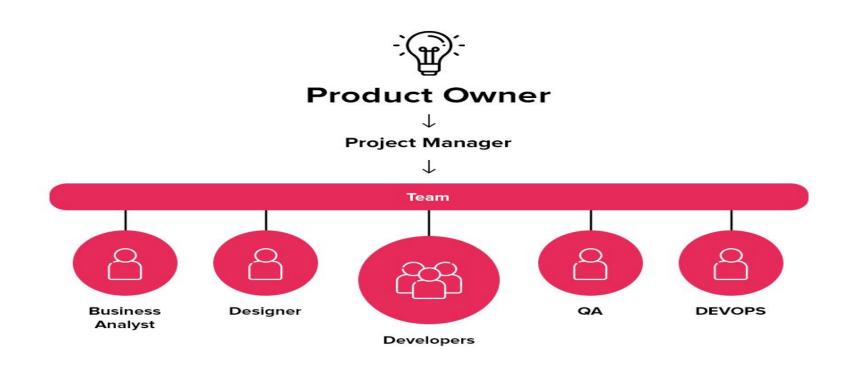
#### **Agile**



#### **DevOps**



#### Structure of Software Development Team



### Roles Product Owner

- Holds responsibility for a product vision and evolution.
- Make sure a final product meets customer's requirement.
- They are the decision maker.

#### <u>Roles</u> Project Manager

- Make sure a product is delivered on time and within budget.
- Manages and motivates the software development team.
- They set up strategy and vision of a product.

## Roles Business Analyst

- Understands customer's business processes.
- Translate customer's business needs into requirements.

#### Roles UX/UI Designer

- Transforms a product vision into user friendly designs.
- Creates user journeys for the best user experiences.

### Roles Software Architect

- Design a high level software architecture.
- Select appropriate tools and platforms to implement the product vision.
- Sets up code quality standards and performs code review.

### Roles Software Developer

- Codes a application.
- Solves any technical problem during development lifecycle.
- Two types of developer: front-end developer and back-end developer.

# Roles Software Testing Engineer

- Makes sure an application performs according to requirements.
- Spots functional and non-functional defects.
- Tests results and assures quality of product.

### Roles Database Administrator

- Database handling.
- Software installation and maintenance.
- Database backup and recovery.
- Authentication

#### Thank You!



Any Question?