**SDLC FOR PHONE-DIRECTORY**

**Stage 1: Planning and Requirement Analysis**

* Conduct stakeholder interviews to gather requirements
* Define project scope, timeline, and budget
* Identify functional and non-functional requirements

**// Define project scope and timeline**

project\_scope = "Develop a phone directory software"

project\_timeline = "weeks"

**// Identify functional requirements**

functional\_requirements =

"Store contacts with name, phone number, and email",

"Search for contacts by name or phone number",

"Add, edit, and delete contacts",

"Display contact information"

**// Identify non-functional requirements**

non\_functional\_requirements =

User-friendly interface

Secure data storage

**Stage 2: Designing Architecture**

* Design system architecture and technology stack
* Define database schema and data models
* Create prototypes of the user interface

// Design system architecture

system\_architecture = "Client-Server Architecture"

technology\_stack = java, HTML/CSS/JS,

// Define database schema

database\_schema =

"contacts":

{"name": "string", "phone\_number": "string", "email": "string"}

// Create prototypes

login\_page: username and password input fields

contact\_list\_page: list of contacts with search bar

contact\_details\_page: contact information with edit and delete buttons

**Stage 3: Implementating**

* Start developing the phone directory software
* Write clean, modular, and reusable code
* Implement the database schema.
* Implement features and functionalities defined in the SRS document
* Conduct unit testing and integration testing

**Stage 4: Testing**

* Conduct system testing and user acceptance testing
* Test software for functionality, performance, and security
* Identify and fix any defects or issues found during testing

// Conduct system testing

# Test entire system for functionality

// Conduct user acceptance testing

# Test system with real users

// Identify and fix defects or issues

# Fix defects or issues found during testing

**Stage 5: Deployment**

* Deploy phone directory software to production
* Configure system for deployment
* Conduct post-deployment testing and monitoring
* Provide training and support to users

**Stage 6: Maintenance**

* Monitor system performance and troubleshoot issues
* Fix defects and bugs reported by users
* Implement changes and updates to the software
* Continuously gather feedback from users to improve the software