

# NativeScript Mobile App Development

## 1. Introduction to NativeScript

- Overview of NativeScript
- NativeScript and TypeScript integration
- Installing NativeScript
- The NativeScript Command Line Interface
- Creating your first NativeScript application

### Lab:

- Install NativeScript on your machine.
- Create and run a 'Hello World' application using the NativeScript CLI.

## 2. The Project Structure

- Project directory overview
- The `app` folder
- Foundational components
- Creating a second page

### Lab:

- Explore the project directory of a sample NativeScript application.
- Modify components in the `app` folder and observe changes.

## 3. Declarative UI, Styling, and Events

- Overview of Declarative UI
- Creating a settings page using Declarative UI
- Understanding Binding and Event systems
- Styling the UI using CSS

### Lab:

- Create a settings page with buttons and toggles using Declarative UI.
- Bind an event to a button and apply custom CSS for styling.

## 4. Building a Featured Application

- Application layouts
- Building the main screen
- Adding Fonts and Icons
- Communication with the server
- Testing the application

### Lab:

- Build a small featured application (e.g., To-Do List app).
- Fetch and display data from a mock server.

## 5. Installing Third-Party Components

- Finding and installing third-party components
- Using third-party components in an application

### Lab:

- Integrate a third-party plugin into your featured application.

## 6. Platform Differences

- Differences between Android and iOS platforms
- Code differences
- Platform classes
- Declarative UI
- Handling platform-specific files
- Managing screen size and device differences

**Lab:**

- Test your application on both Android and iOS emulators.
- Apply platform-specific customizations.

**7. Testing and Deploying Your App**

- Unit testing on devices
- Debugging and understanding the call stack
- Preparing the application for deployment
- Publishing your application

**Lab:**

- Perform unit tests on your application.
- Prepare the application for deployment and simulate a deployment process.