MASTER OF TECHNOLOGY
(INTELLIGENT SYSTEMS)

USER GUIDE

WingSpan

- Enhancing Birdwatching with AI

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Accessing WingSpan Application

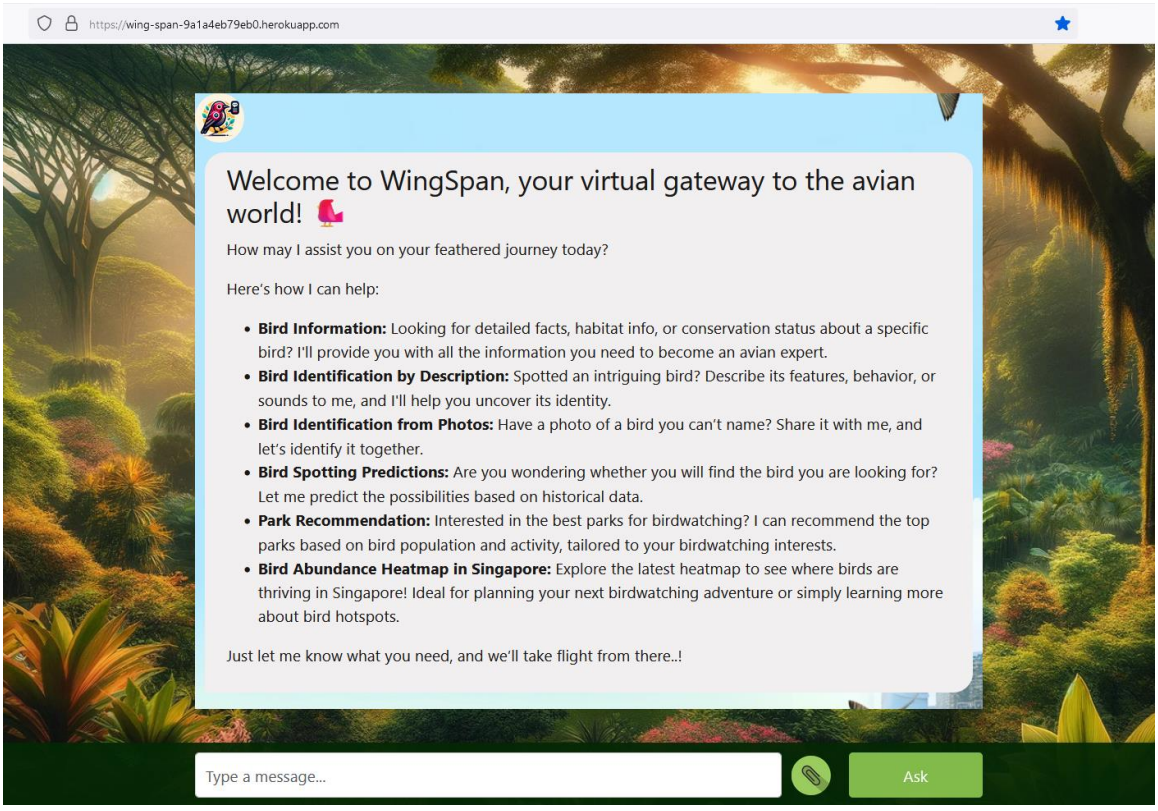
WingSpan is accessible both online and offline. This guide details on how to access the deployed online application as well as setup process for running the application locally (offline)

1. Accessing Online

The application is hosted on the Heroku cloud and can be accessed through the URL provided below.

URL: https://wing-span-9a1a4eb79eb0.herokuapp.com/

Interacting with the chat application is straightforward with the very intuitive user interface.



2. Running the Web application Locally

2.1 Setting Up a Python Environment Using Conda

1. Download and install Anaconda from the Anaconda website, ensuring you select a version that includes Conda.
2. Open Anaconda Prompt:
   - Launch from the Start Menu (Windows) or terminal (macOS and Linux).
3. Create a New Conda Environment with the runtime python version for the application:
   - Command: ***conda create -n wingspan python=3.11.7***
4. Activate the Conda Environment:
   - Command**: *conda activate wingspan***

2.2 Django Web Application Local Set up

1. Clone the below GitHub repository to your local machine.
   https://github.com/jithinkrn/IRS-PM-2024-01-13-IS06PT-GRP-WingSpan.git

   Command:
   git clone https://github.com/jithinkrn/IRS-PM-2024-01-13-IS06PT-GRP-WingSpan.git

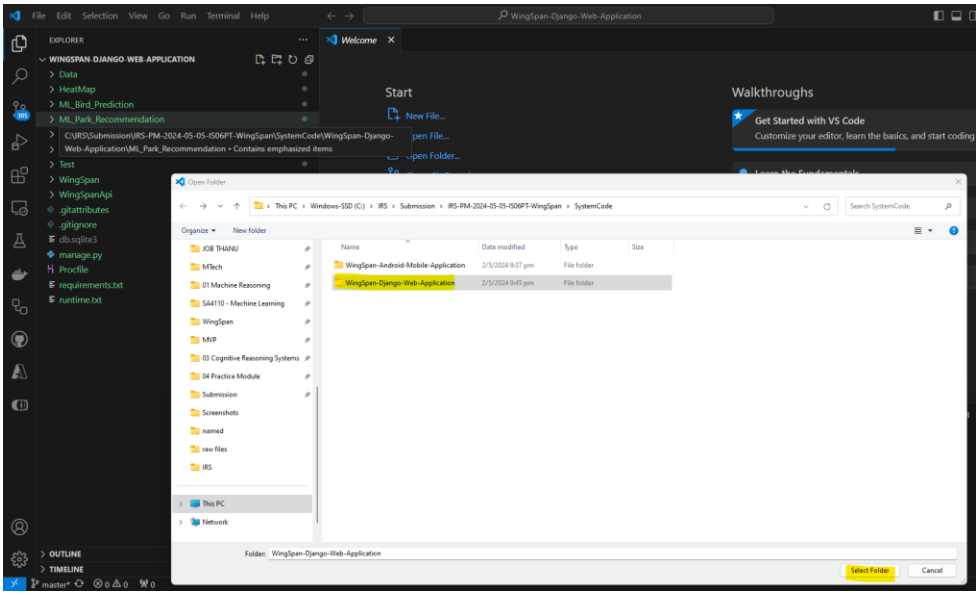
2. Install requirements.txt in your Conda environment created earlier. The requirements.txt file is located at*:*

   *~\IRS-PM-2024-01-13-IS06PT-GRP-WingSpan\SystemCode****WingSpan-Django-Web-Application***

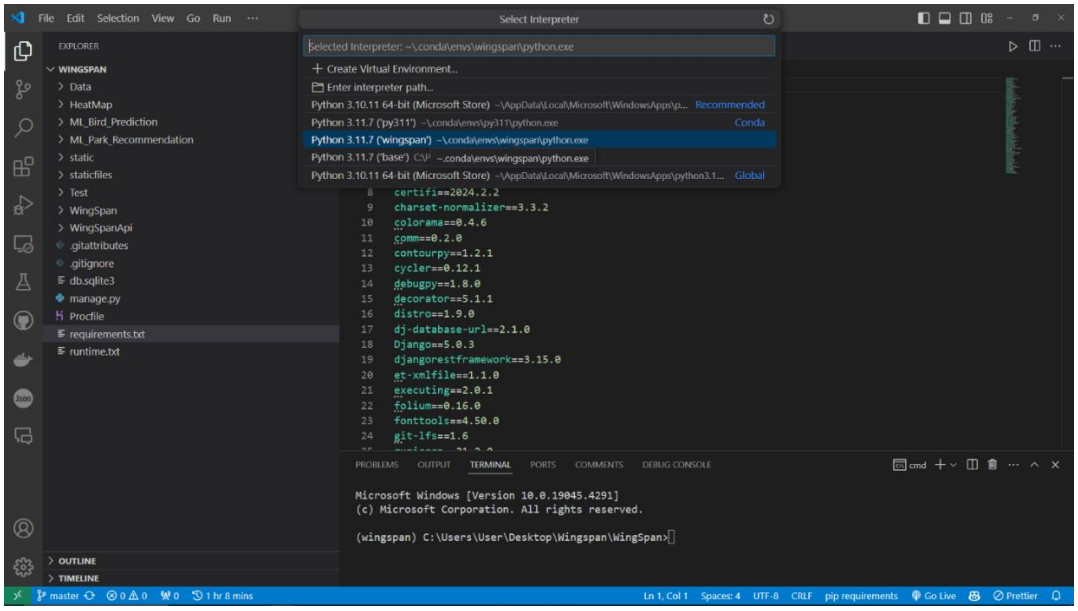
   Command:
   pip install -r requirements.txt

3. Launch Visual Studio Code and Open the Project Folder “WingSpan-Django-Web-Application” by navigating to below directory in the repo

   *~/IRS-PM-2024-05-05-IS06PT-WingSpan\SystemCode**WingSpan-Django-Web-Application***



4. Selecting the Python Environments in Visual Studio Code
   - Open Command Palette (Ctrl+Shift+P or Cmd+Shift+P).
   - Choose the conda environment created earlier with *python=3.11.7 and all the requirements installed*



5. Configure Open AI API Key as environment variable (The API key will be uploaded to Canvas with the submission documents in a text file). In visual studio menu go to Terminal > New Terminal and enter the command below

   Windows Command:
   Run: *setx OPENAI_API_KEY "PROVIDED_API_KEY_HERE"*

   Linux/Mac Command:
   export OPENAI_API_KEY “PROVIDED_API_KEY_HERE ":~/bin

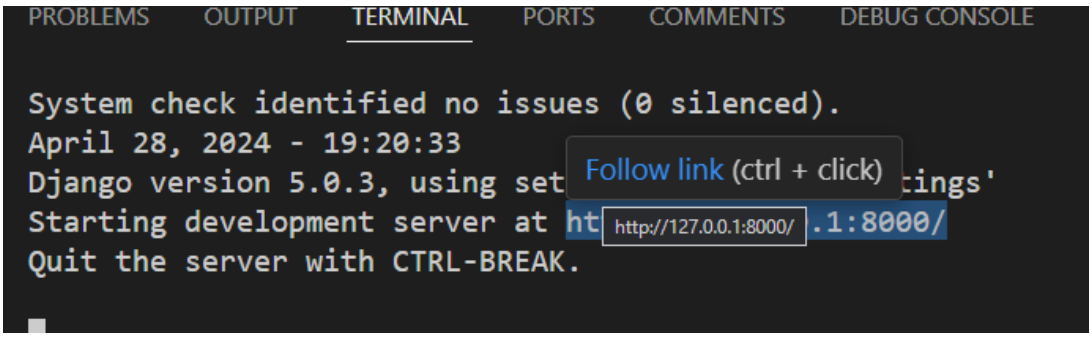
6. **For Linux/Mac users only:** In the VS code terminal, enter the following command.
   python manage.py migrate

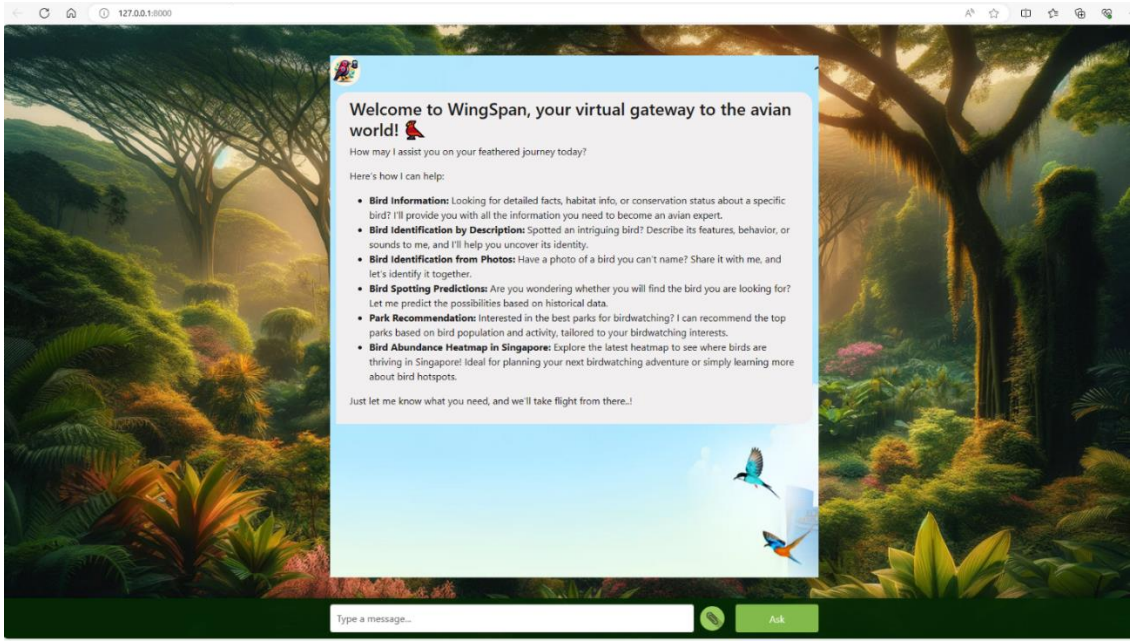
```
WingSpan-Django-Web-Application % python manage.py migrate
```

7. **Starting the server:** In the VS code terminal, enter the following command:
   python manage.py runserver

```
(wingspan) C:\Users\User\Desktop\Wingspan\WingSpan>python manage.py runserver
```

Once the server runs. It will display the local host link. Open browser and navigate to http://127.0.0.1:8000/ to view the application.





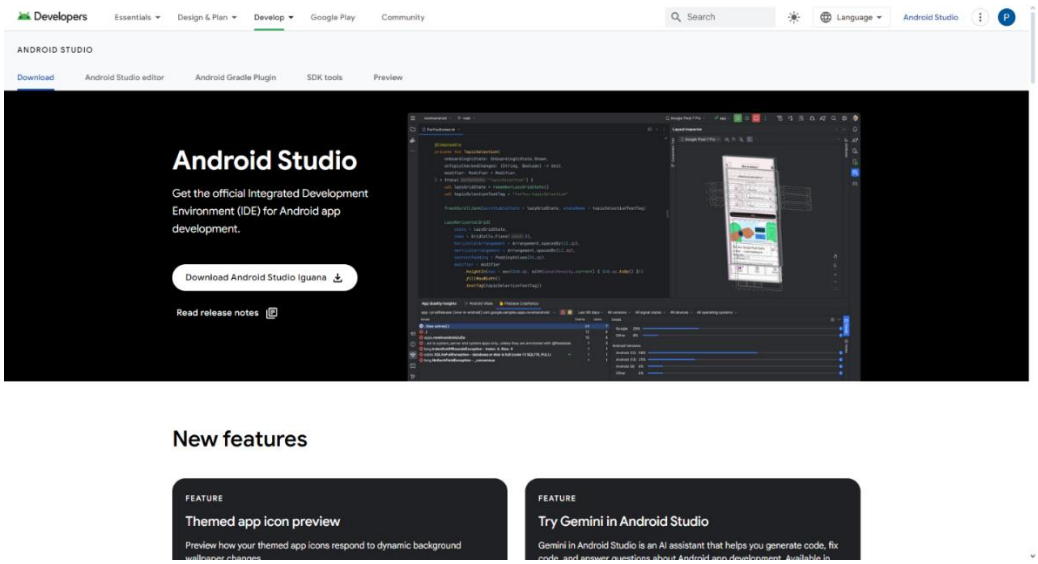
If the OPEN AI Key and other requirement setups are correct, you should be able to, chat with application.

8. To stop the server, you can press CTRL+C in the terminal.

3. Running the WingSpan Android Mobile Application Locally

3.1 Android Studio Setup.

- Download Android Studio from the below URL
  https://developer.android.com/studio?_gl=1*datbhy*_up*MQ..&gclid=CjwKCAjw88yxBhBWEiwA7cm6pb48LLsVpv1FA3886J7c_aptlXltuuFvBTcGujgREyaP5LpL7-NXIxoCjMUQAvD_BwE&gclsrc=aw.ds

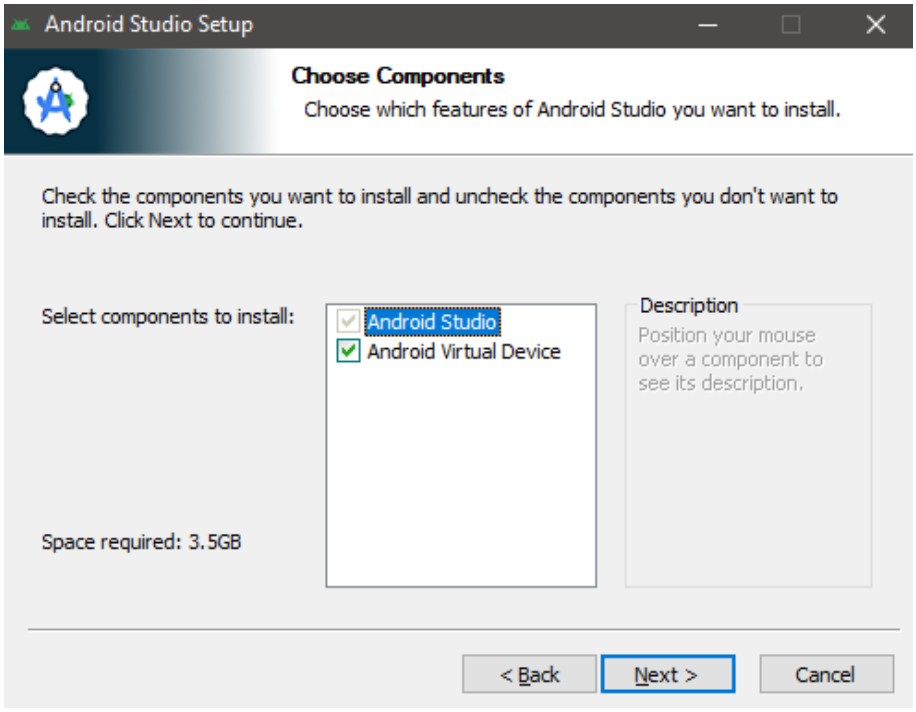


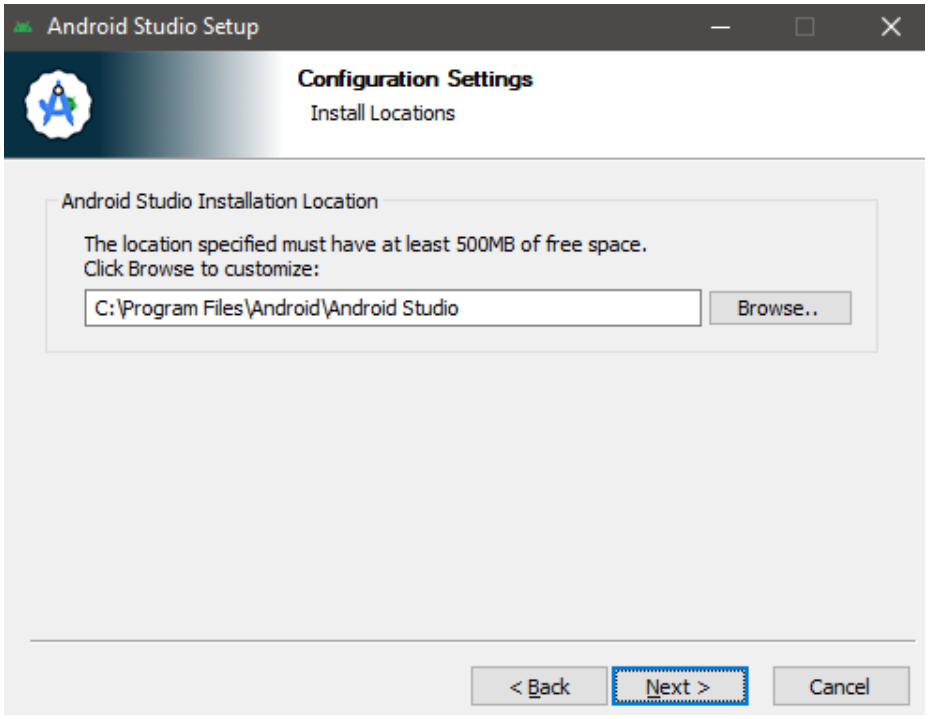
- Ensure your system meets the installation requirements.

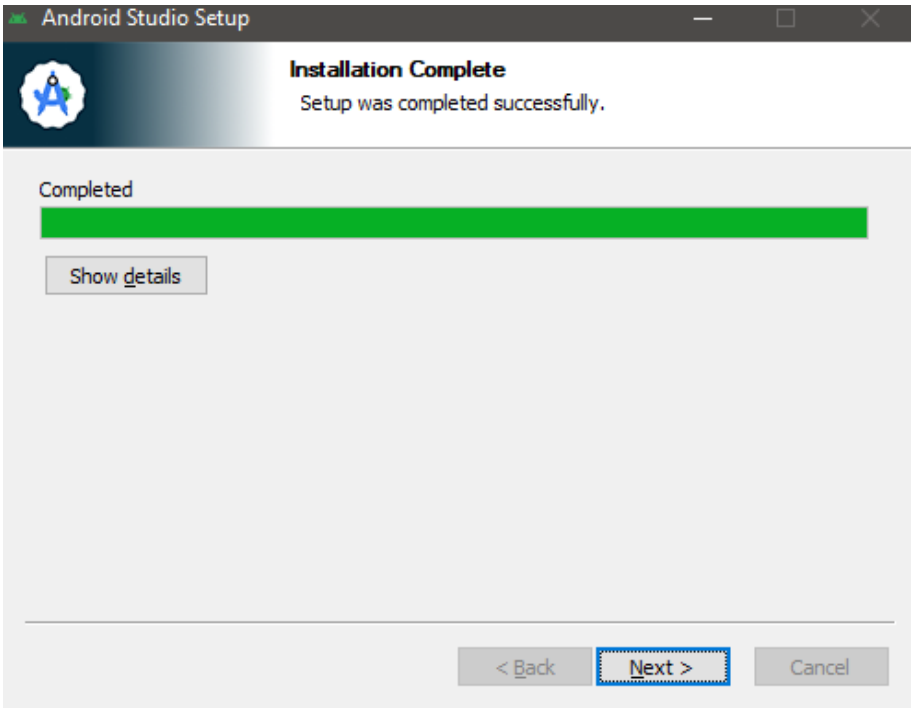
3.2 Installing Android Studio

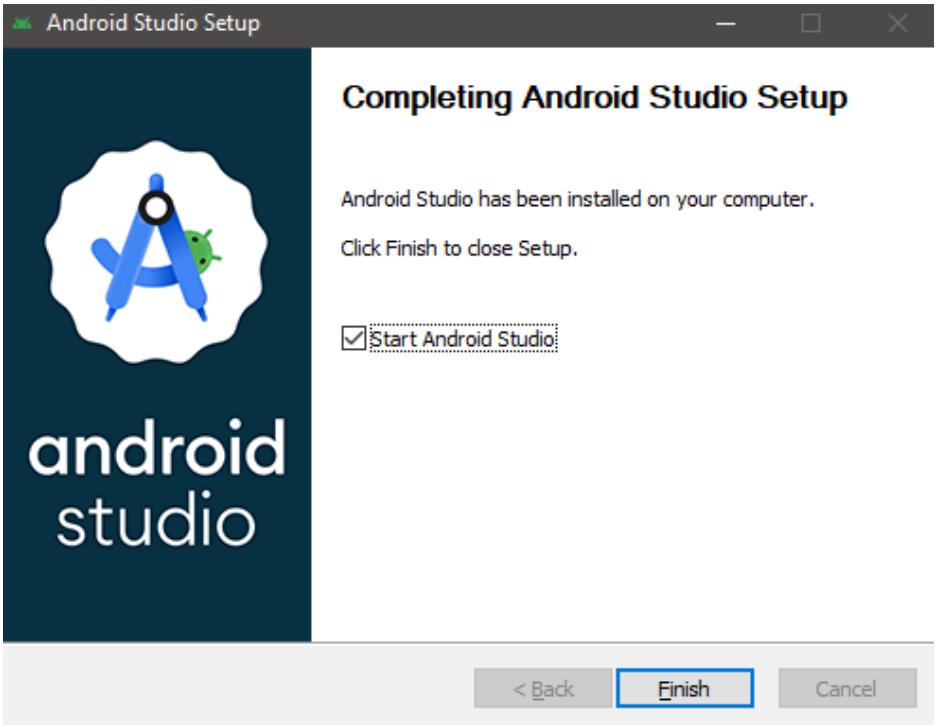
Follow the on-screen instructions to install Android Studio. This typically includes selecting an installation directory, choosing components to install, and configuring initial settings like memory allocations.


Android Studio Setup
Welcome to Android Studio Setup
Setup will guide you through the installation of Android Studio.
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.
Click Next to continue.
android studio
< Back
Next >
Cancel


Android Studio Setup
Choose Components
Choose which features of Android Studio you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
Android Studio
Android Virtual Device
Description
Position your mouse over a component to see its description.
Space required: 3.5GB
< Back
Next >
Cancel


Android Studio Setup
Configuration Settings
Install Locations
Android Studio Installation Location
The location specified must have at least 500MB of free space.
Click Browse to customize:
C:\Program Files\Android\Android Studio
Browse..
< Back
Next >
Cancel

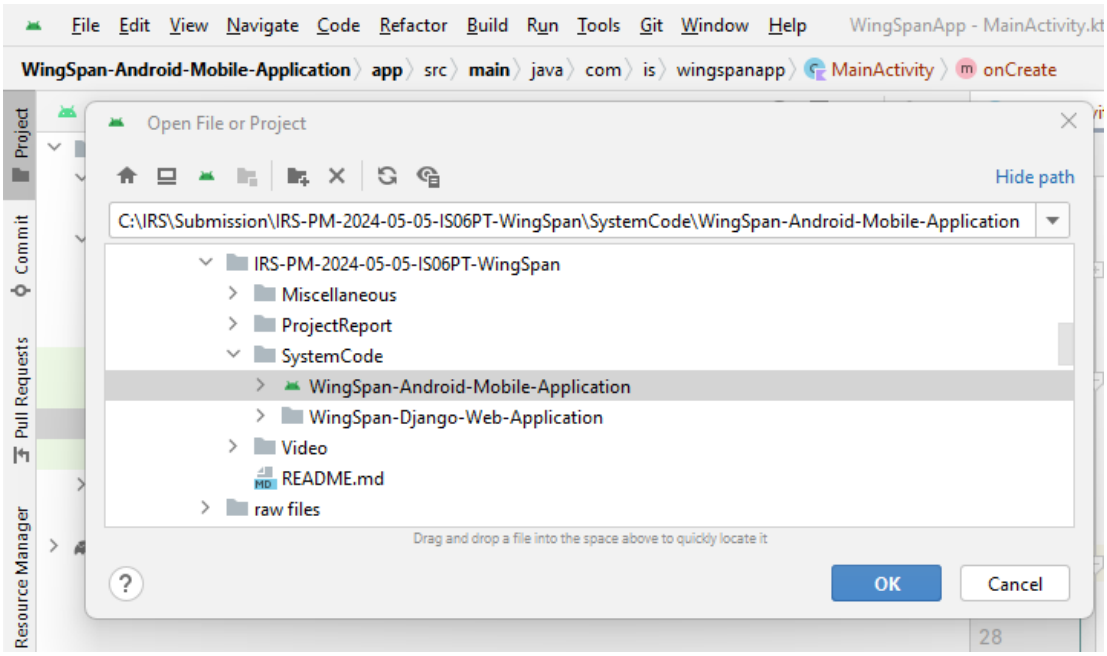

Android Studio Setup
Installation Complete
Setup was completed successfully.
Completed
Show details
< Back
Next >
Cancel



3.4 Opening the Project

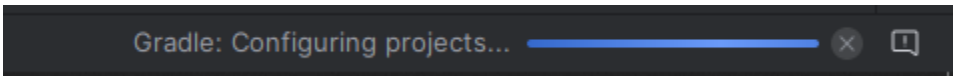
Launch Android Studio and open the **WingSpan-Android-Mobile-Application** project with Android Studio.

Location:
*~\IRS-PM-2024-01-13-IS06PT-GRP-WingSpan\SystemCode**WingSpan-Android-Mobile-Application***



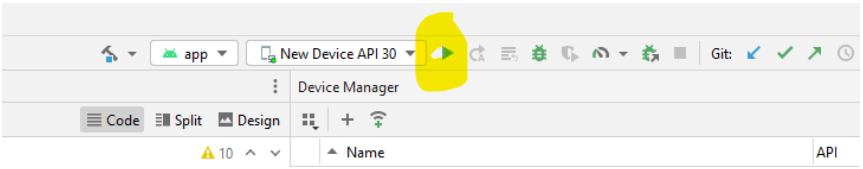
3.5 Gradle Build and Project Configuration

- Allow Android Studio to complete the Gradle build.



3.6 Running the application

Once the build is completed click the run Button from the menu.



After the emulator starts, users will be able Interact with the application in the emulator.