

# 3D-AI HACKATHON

## **PROJECT ON :**

To generate 3D AI Model using text, images or 3D mesh data.

## MENTOR NAME:

*Ms.R.Devi*

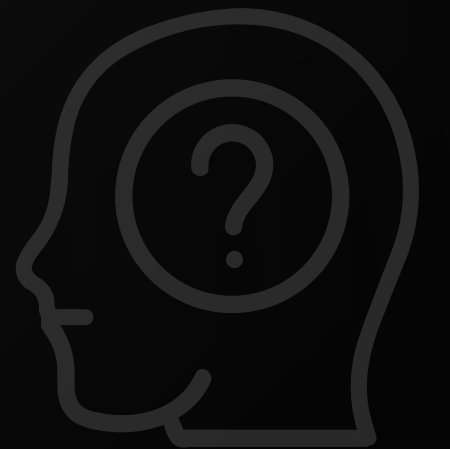
(Assistant professor CSE)

## PRESENTED BY:

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## **PROBLEM STATEMENT:**

Stable Diffusion, Combines text, images or 3D mesh data to generate 3D models using AI.



# IDEATION:

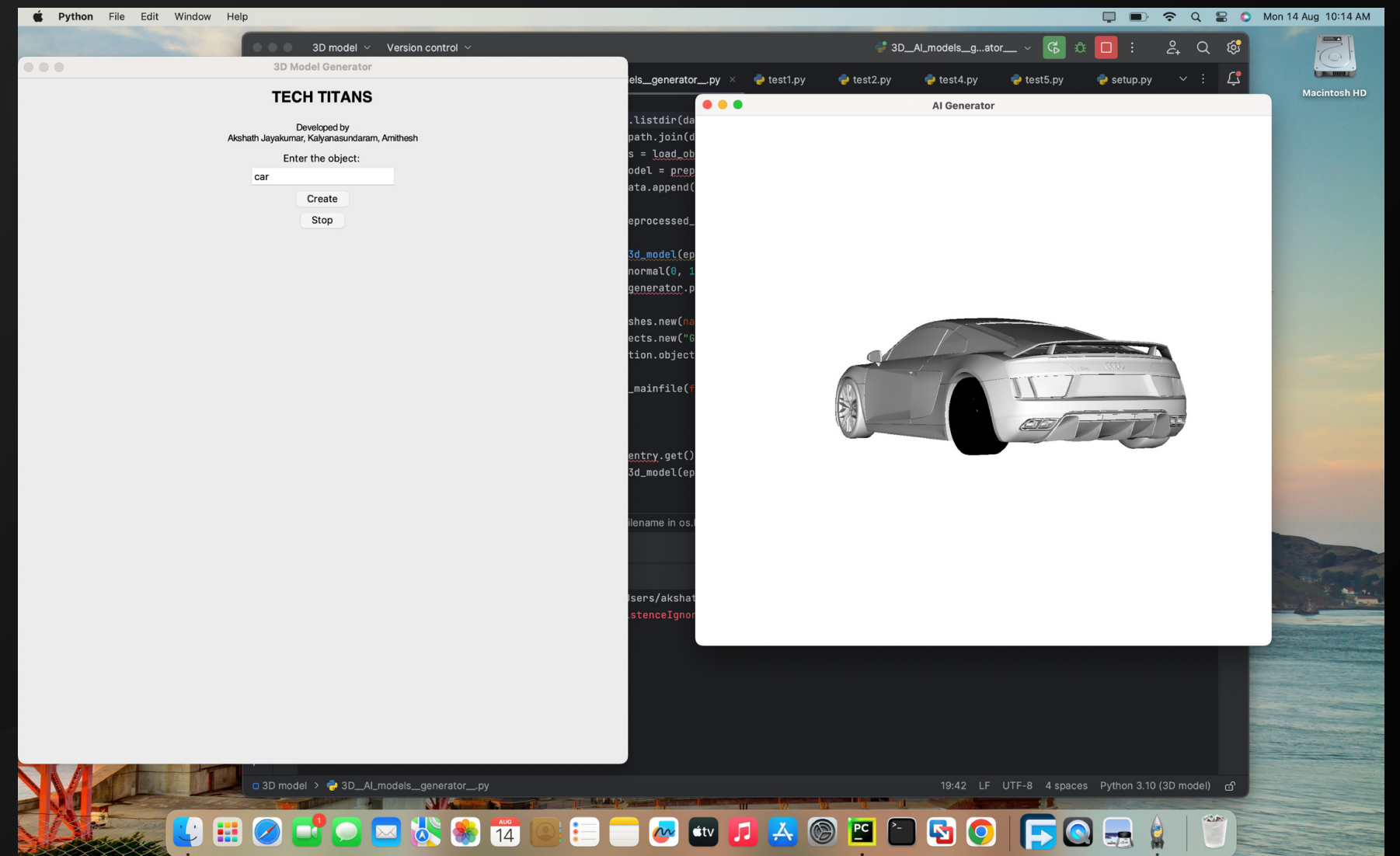
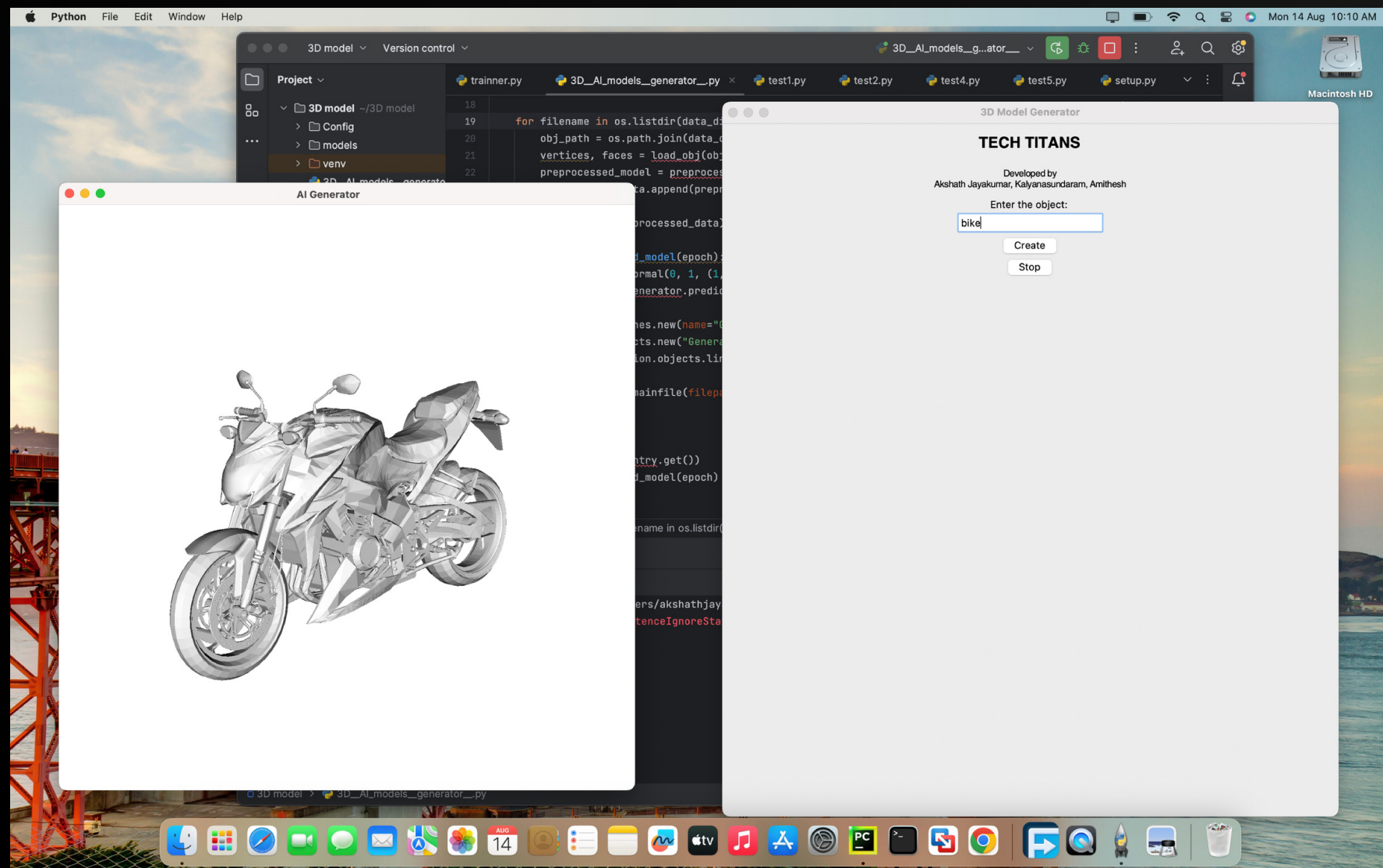
- Develop an AI model that translates text prompts describing shapes, scenes, or objects into detailed 3D point clouds. The system should intelligently interpret the textual input and generate accurate point cloud representations.
- Implement a feature that allows users to describe a 3D object using natural language text. The AI model should interpret the text description and generate a corresponding 3D model, adjusting its shape, size, and details based on the textual input.

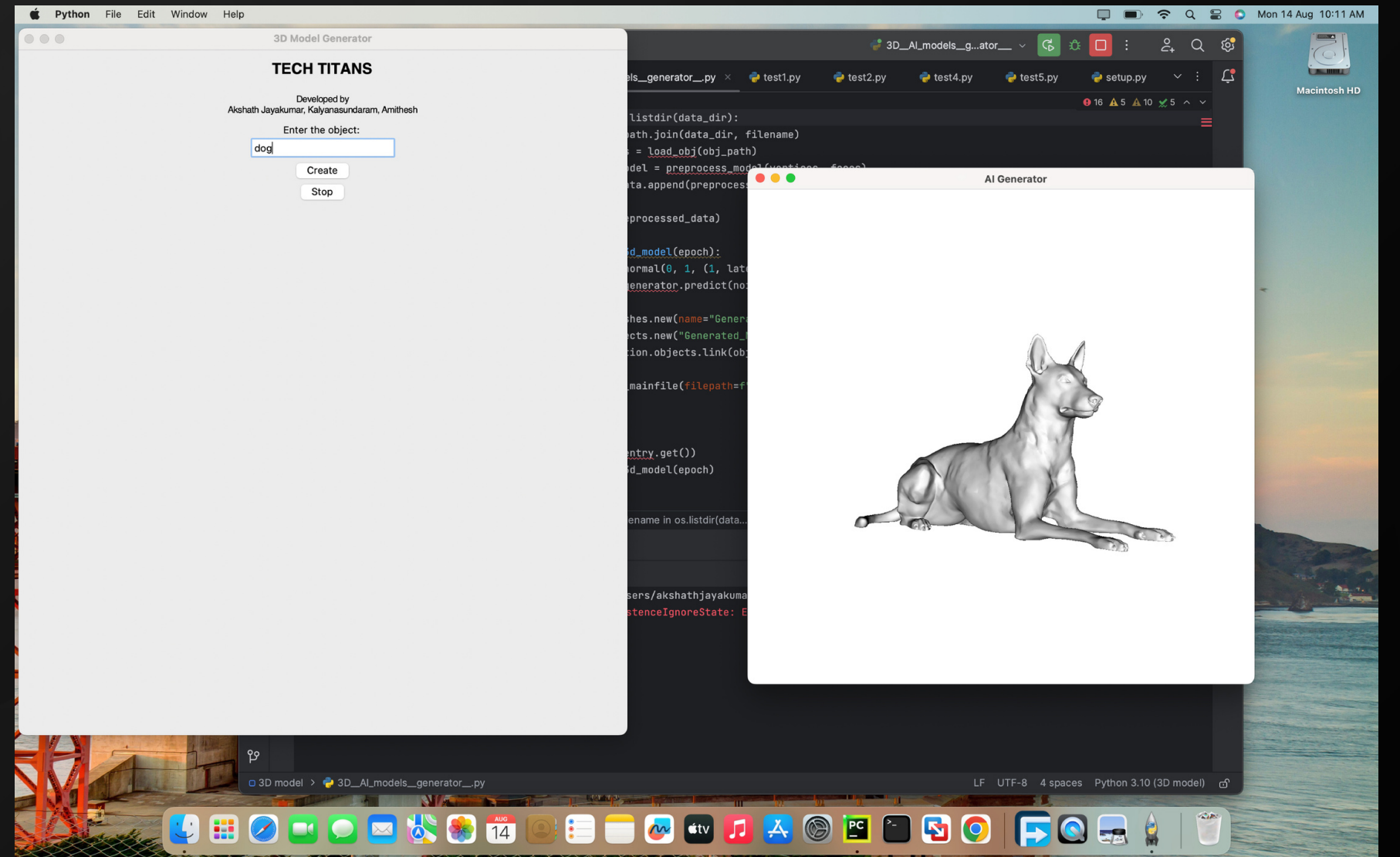
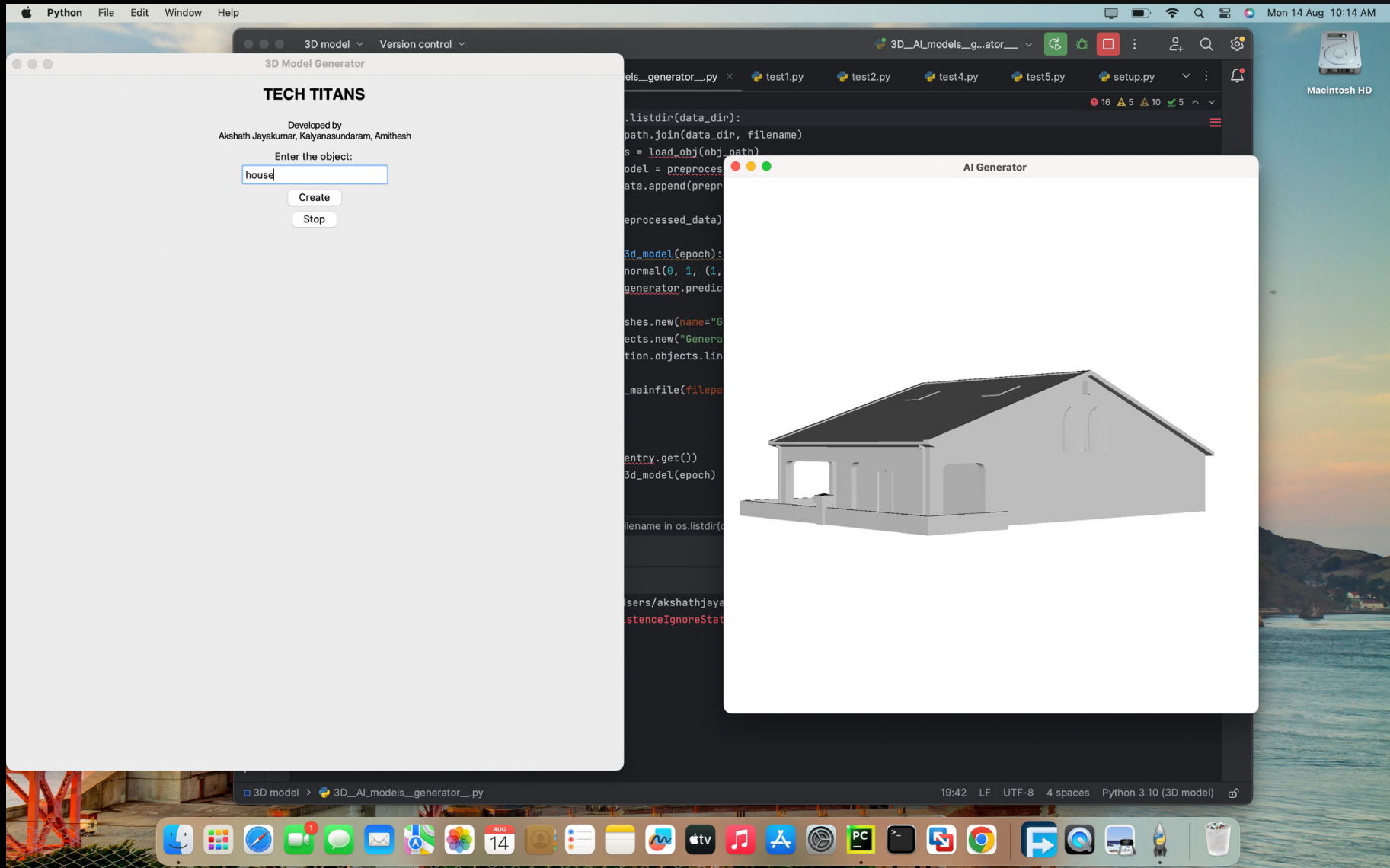


- Develop an AI system that takes 2D reference images as input and reconstructs 3D shapes with high accuracy. Utilize advanced computer vision techniques, such as photogrammetry or depth estimation, to convert 2D information into detailed 3D structures.
- Allow users to input existing 3D mesh data of objects. The AI model should be able to incorporate these meshes into the generation process, using Stable Diffusion to combine them with other input sources for enhanced accuracy.



# OUTPUT





The background features a dark grey, almost black, central area. This is framed by abstract, flowing shapes in shades of blue and purple. A bright blue shape is in the top-left corner, a dark blue circle is in the top-right, and a purple-to-blue gradient shape is in the bottom-right.

**THANK YOU**