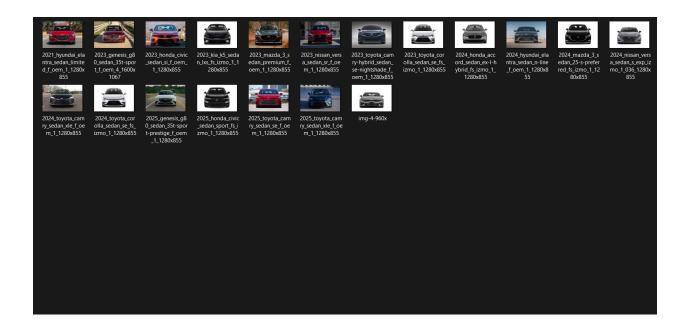
Step-by-Step Guide for Labeling and Annotating Images Using Makesense.ai (used for Training the model)

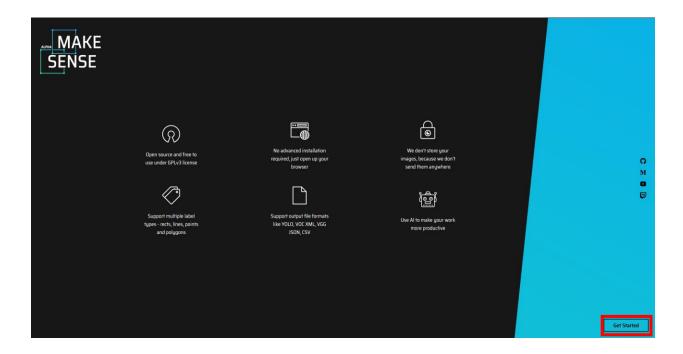
1. Prepare Your Images

- Collect all the images you want to annotate and ensure they are in a supported format (e.g., JPEG, PNG).
- Organize them into a single folder for easier upload.



2. Access Makesense.ai

- Visit the makesense.ai website.
- No account is needed; you can start annotating directly.



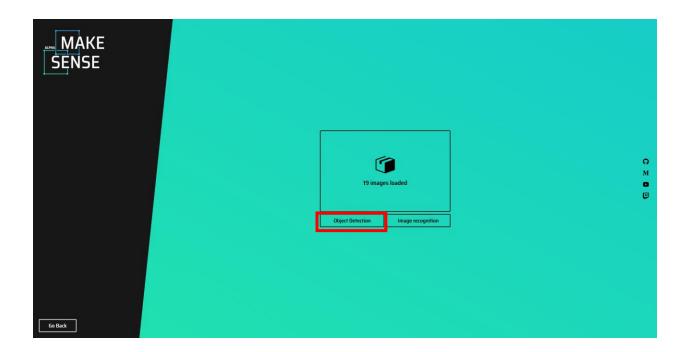
3. Upload Images

- Click on the "Get Started" button on the homepage.
- Select "**Upload Images**" and choose your image files or drag and drop them into the uploader.
- Wait for the images to load onto the platform.



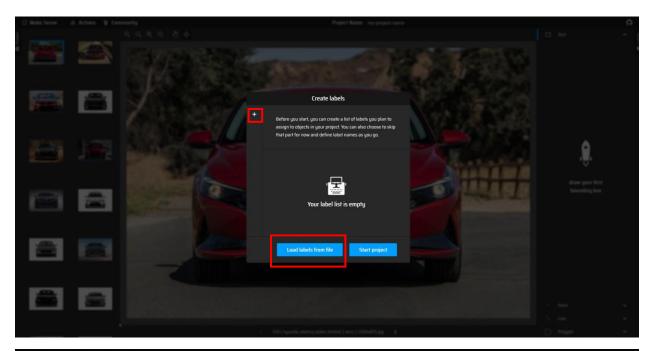
4. Choose Task Type

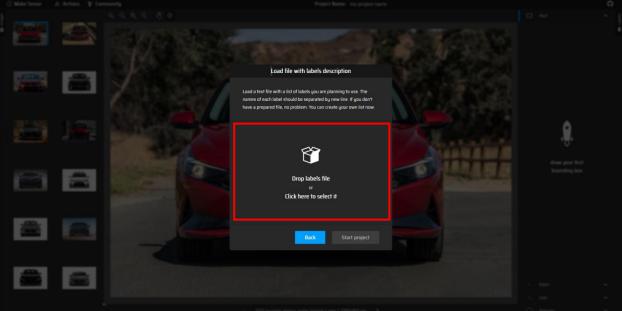
• After uploading, you will be prompted to select either **Object Detection** or **Image Recognition**. For this use case, select **Object Detection**.



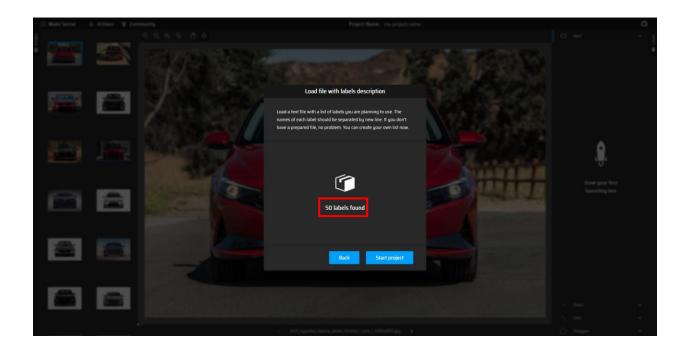
5. Create Labels

- Next step is to add labels. Click "+" and type the name of the label, or select "Load labels from file"
- For this use case, import the .txt file containing 50 design points using "Load labels from file" option

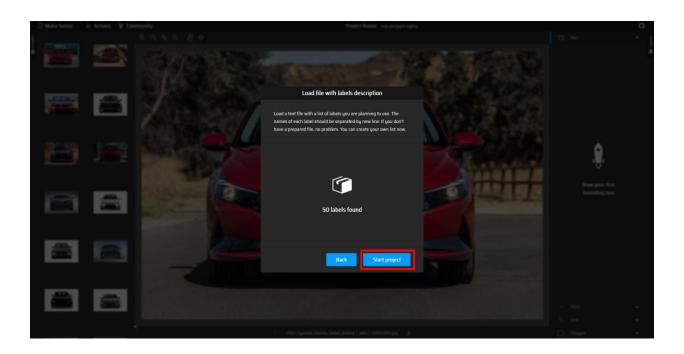




After importing:



Click on "Start Project"



6. Annotate Images

• Select an image from the uploaded list.



- Use the tools provided to annotate:
 - For **Bounding Boxes**, click on "**Rect**" and draw rectangles around objects of interest.
 - o For **Keypoints**, click on "**Point**" to mark specific locations.
 - o For **Lines**, click on "**Line**" to draw lines connecting one point to another
 - o For **Polygons**, click on "**Polygon**" to create multiple points that form a closed shape.



For this use case, we will use the "Point" and "Rect" functionalities

• To draw a bounding box, click on a point and drag your cursor to create the bounding box as shown below:



• Then, assign a label to the bounding box. In this case, select "Bounding Box" from the drop-down labels provided in the .txt file



• To label points, select the "**Point**" functionality, as shown below:



• Next, start labelling the points on the image and assign each point the appropriate label

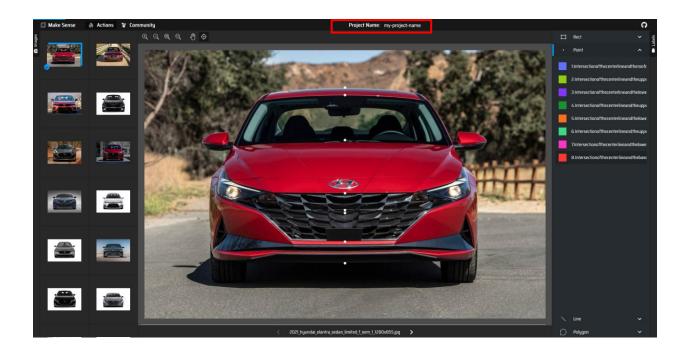


• Continue labelling until all 50 design points have been labelled

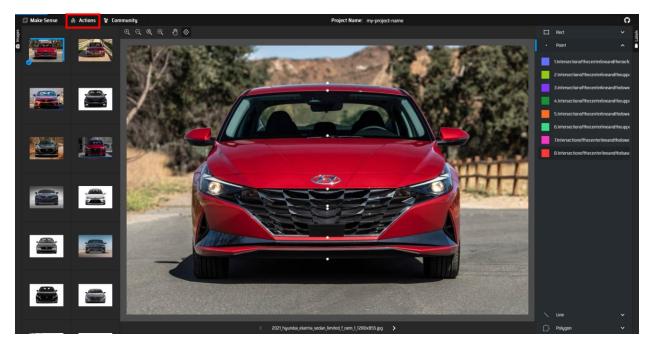
Repeat the process of labelling bounding boxes and points for all the uploaded images

7. Download Annotations

 After annotating all images, click on "Project Name:" to edit and customize your project name



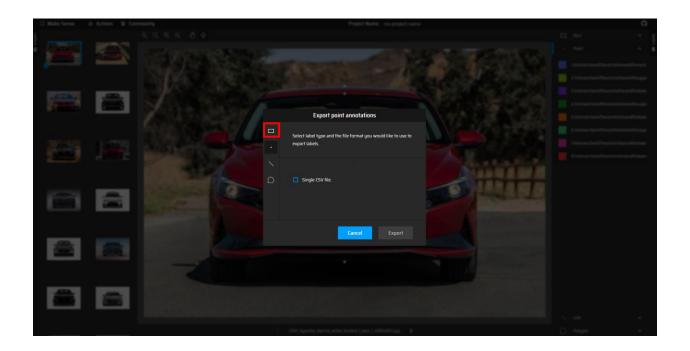
• Then, click on "Actions" button

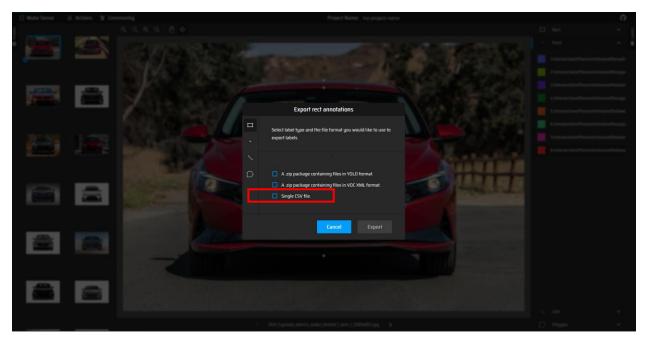


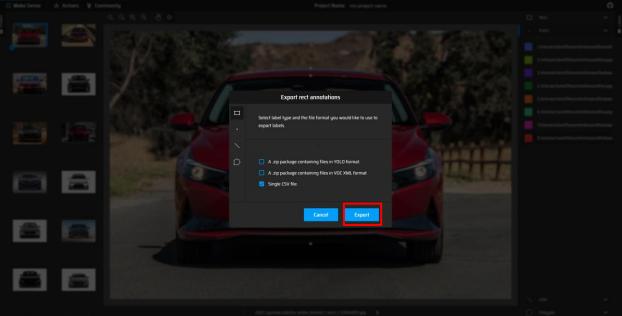
• Next, click on "Export Annotations"



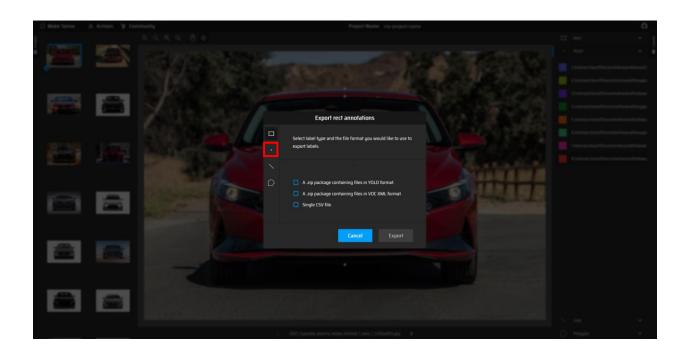
- Choose your desired label type and file format for exporting the labels (e.g., JSON, XML, CSV, or COCO) based on your project needs.
- For this use case, first select the Rectangle box option to export the bounding box annotations as a "Single CSV file"

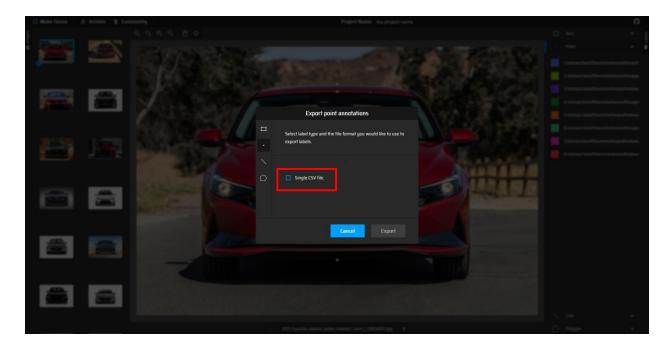


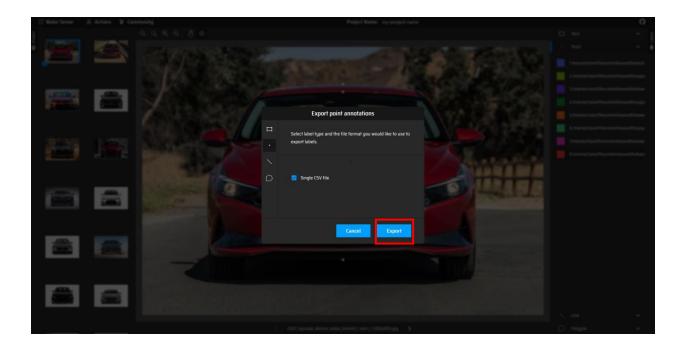




• Next, select the Point option, to export the annotations as a "Single CSV file"

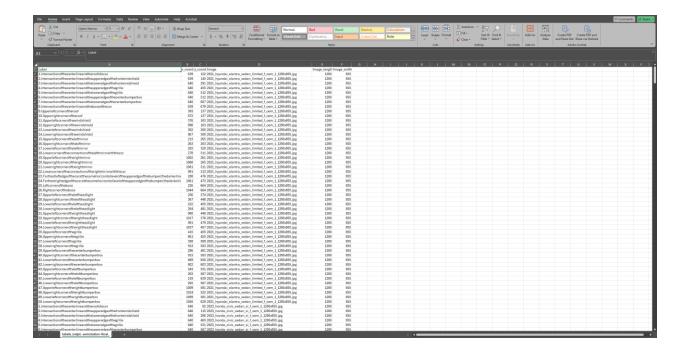


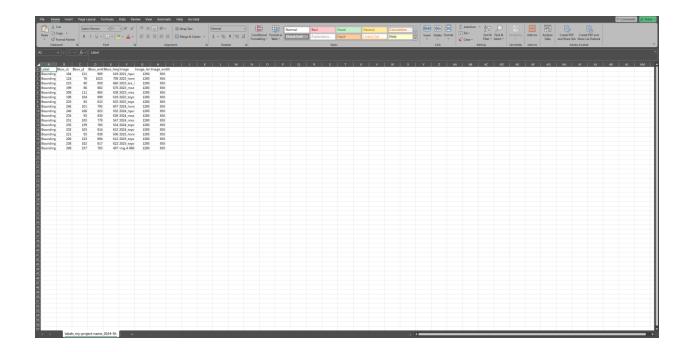




9. Review and Refine

• Open the exported annotation file to ensure all data is accurate and complete.





• If necessary, re-upload images to makesense.ai and refine annotations as needed.

10. Use Annotations for Your Project

- Integrate the annotated data into your project (e.g., machine learning models, image analysis).
- Ensure that the format of annotations aligns with your project requirements.