⚽ Center Circle Keypoint Annotator

This is a simple, easy-to-use desktop annotation tool that helps you manually label **keypoints around the center circle** of a football/soccer field from video frames or images.

🗒️ Features

- Click to add keypoints
- Drag keypoints to adjust
- Undo/reset keypoints
- Navigate freely between images
- Save annotations to a `.json` file
- See helpful instructions and warnings on screen

🖥️ How to Use

1. 🗂️ Start the Tool

- Double-click the provided `.exe` file (e.g., `annotator.exe`)
- A folder selection window will appear
- Choose the folder **that contains your image frames**

2. ✏️ Annotate Images

Once the tool opens:

- **Left-click** to add keypoints (add at least **17** total — 16 around the circle and 1 center)
- **Click and drag** a keypoint to adjust its position
- You'll see live instructions and keypoint counts on the screen

3. 💡 Keyboard Controls

Key	Action
`Left-click`	Add a keypoint
`Drag`	Move a keypoint
`u`	Undo last keypoint
`r`	Reset (clear all keypoints)
`n`	Go to next image
`p`	Go to previous image
`s`	Save current annotations
`Esc`	Exit and auto-save current image

📑 Annotation Format

- Saved in a file called `annotations.json` **inside the selected image folder**
- JSON format stores keypoints per image filename:

```
{
  "image1.jpg": [[x1, y1], [x2, y2], ..., [x17, y17]],
  "image2.jpg": [[x1, y1], [x2, y2], ..., [x17, y17]]
}
```