



VR Platform In Real Estate Industry

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Problem in Real Estate Industry

- High Stock Inventory
- Time-consuming process
- High cost in Marketing/Cost per conversion

Objective

- To build a platform will help to connect with potential customers for real estate companies.
- Real estate sales process would reduce overhead without compromising client experience.
- Our project makes easy for customers to visit multiple properties before deciding on the one they want. This requires numerous time and things get complicated.

PropVR

Three Steps:

- Photo shoot
- Creation tool
- Web embed and sales tool

Photo Shoot

- Insta one x pro camera is used.
- Set up camera in the center of the room on a tripod, then get out of the shot (perhaps behind a wall or in the next room).
- For a room minimum 3-5 shots should be taken.
- ONE X has Wi-Fi preview and control so that you can shoot from afar.
- After finishing photo shoot the resultant image will be in panorama format.

Insta One X pro

Initially which position the camera is placed it should maintain throughout the photo shoot. Otherwise the view of each image will change .



Output

The output will be in
panorama image
format.



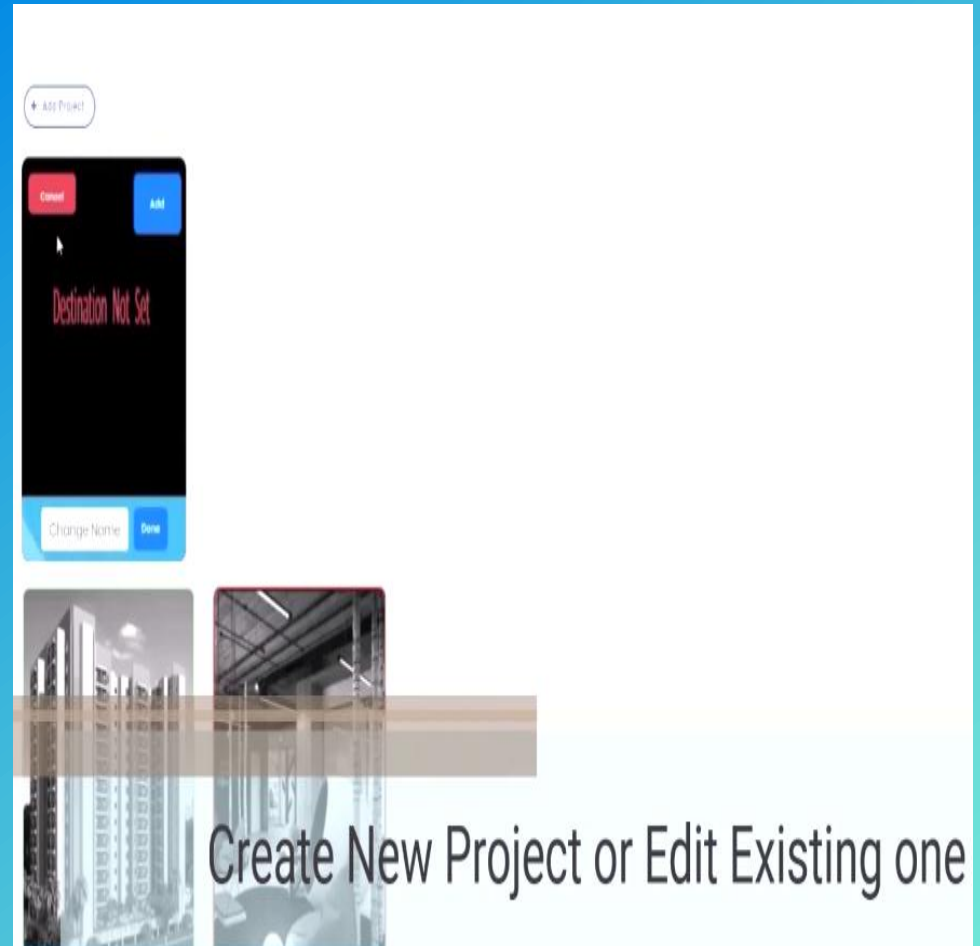
Creation tool

- Upload all the images in firebase storage.
- To Display these 2D images into 360° aframe.js and three.js is used.
- Scene, camera, sky , entity and renderer these are the main things used to display images in 360° view.
- Sky is like 3D sphere shape object. When we put these images in sky two endpoints of the image will connected.
- Now camera is placed inside the 3D sphere. Camera view refers to user view .
- Now these panorama images looks like 360° images.

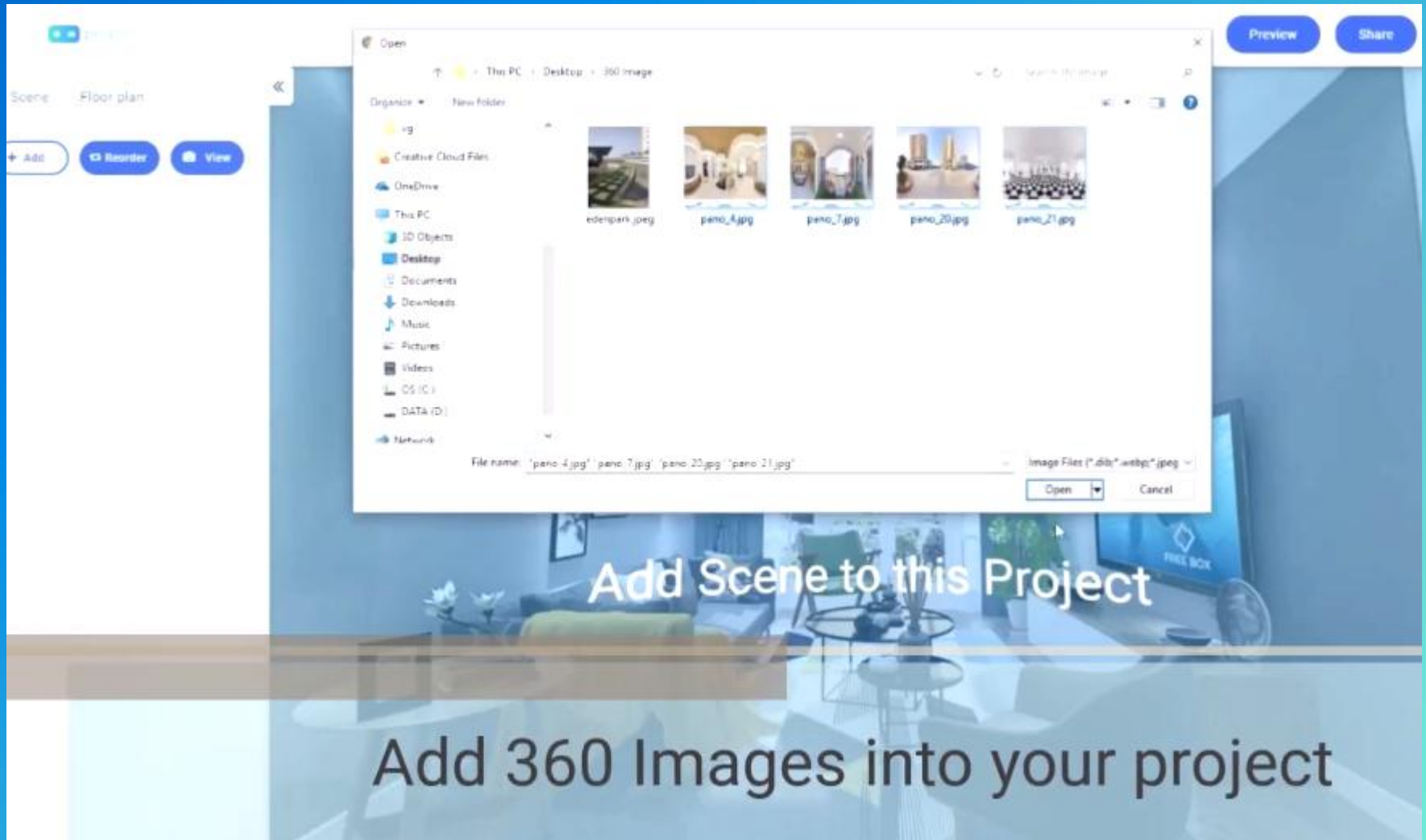
Virtual Walk Through

- Set initial view of all images and store it in database.
- Create 3D sphere placed it each image and link one image to another image.
- This sphere will provide walk-through experience.
- Adding information about each image.

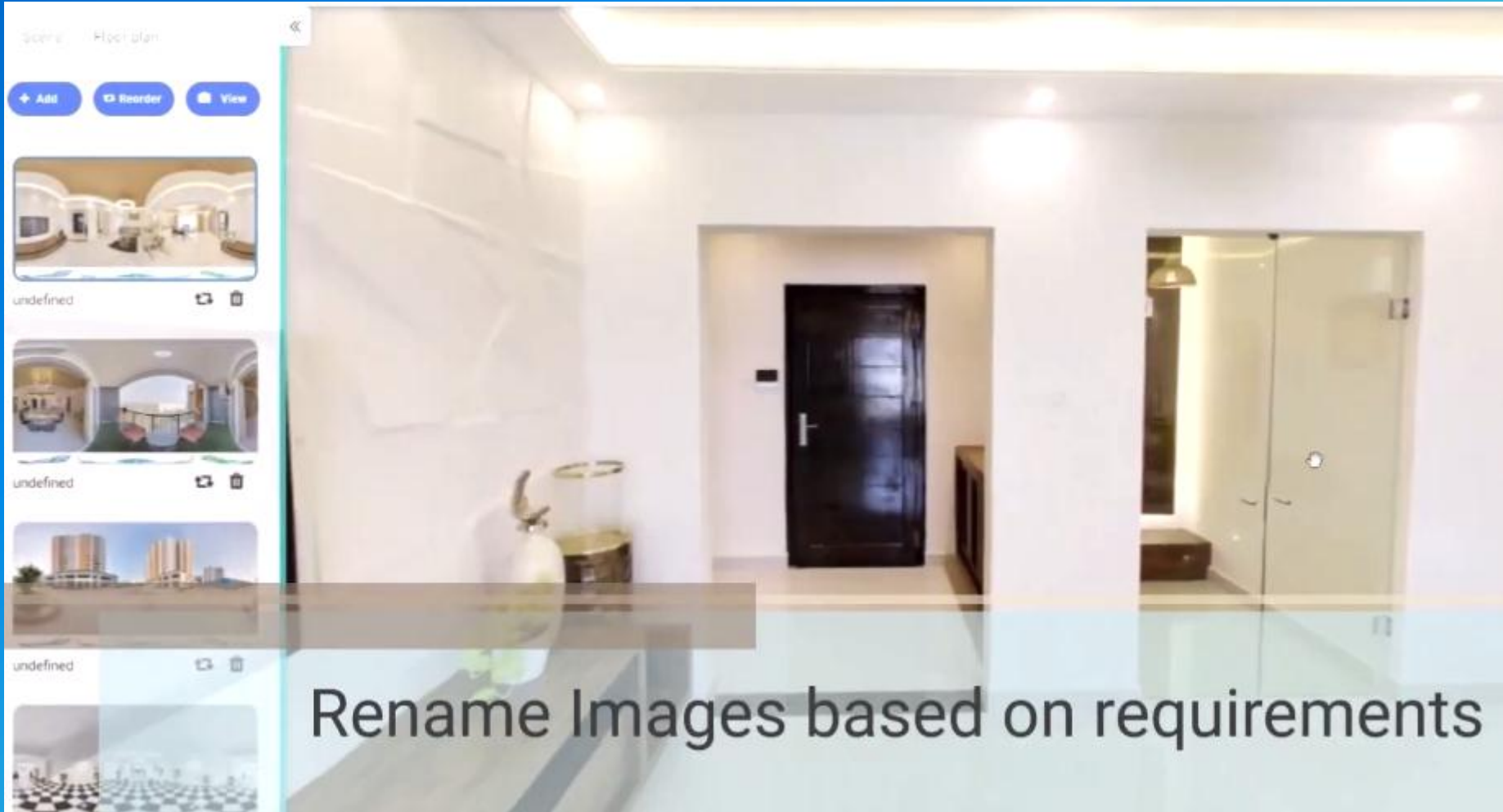
Output



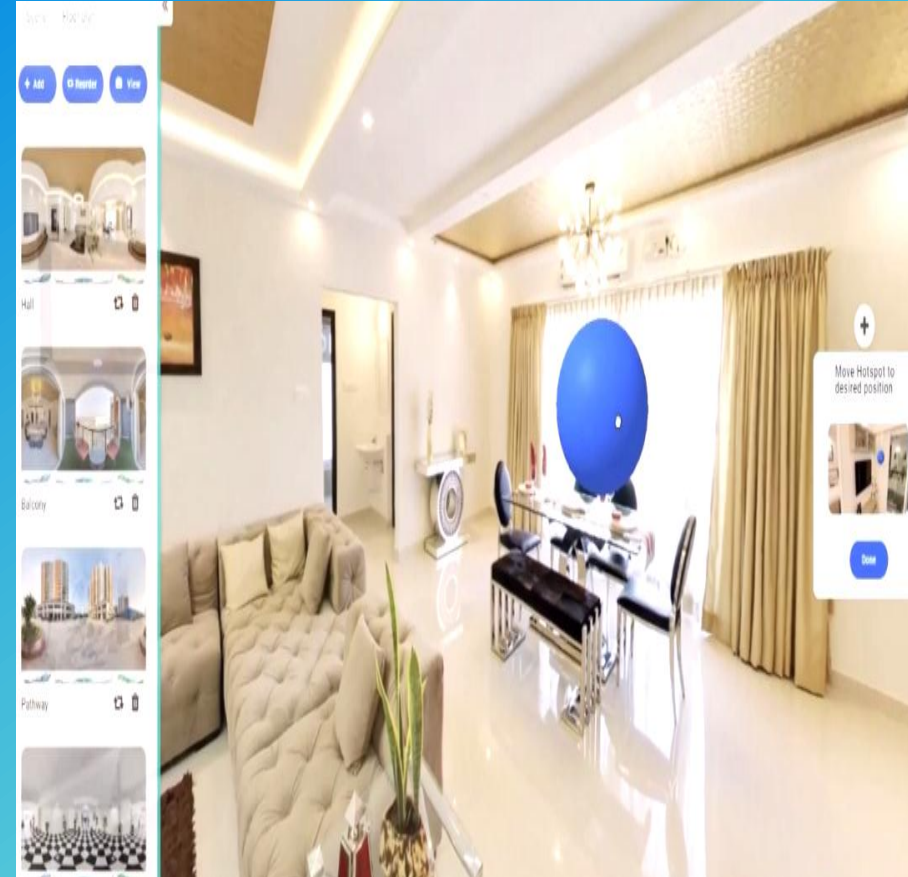
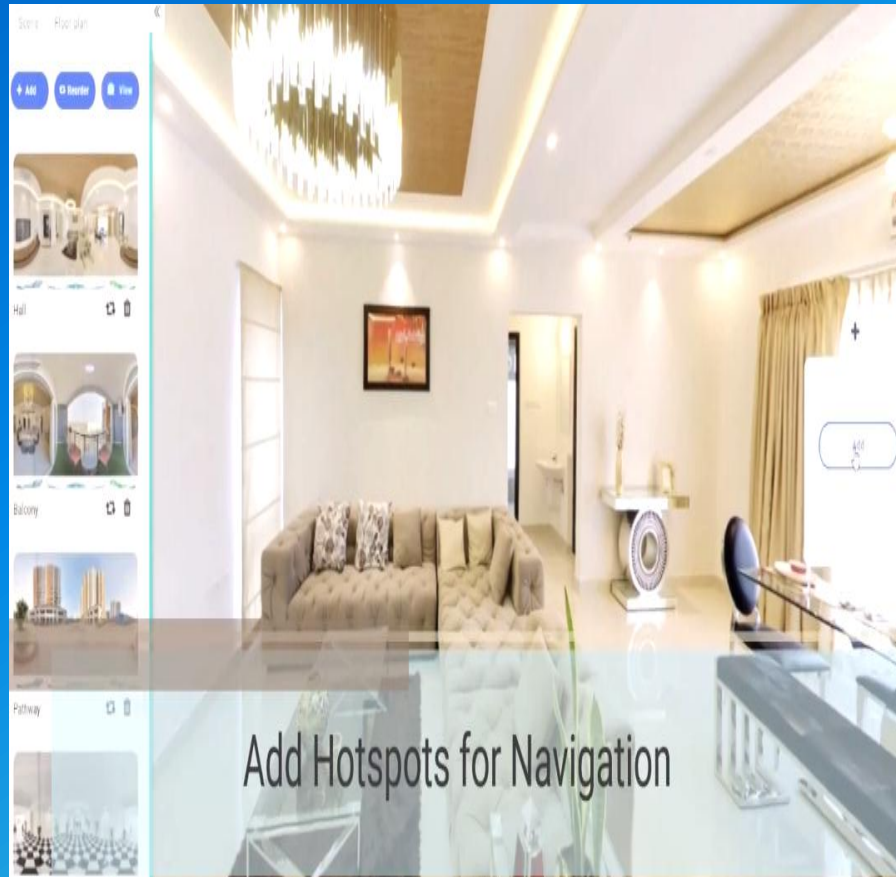
Output



Output



Output

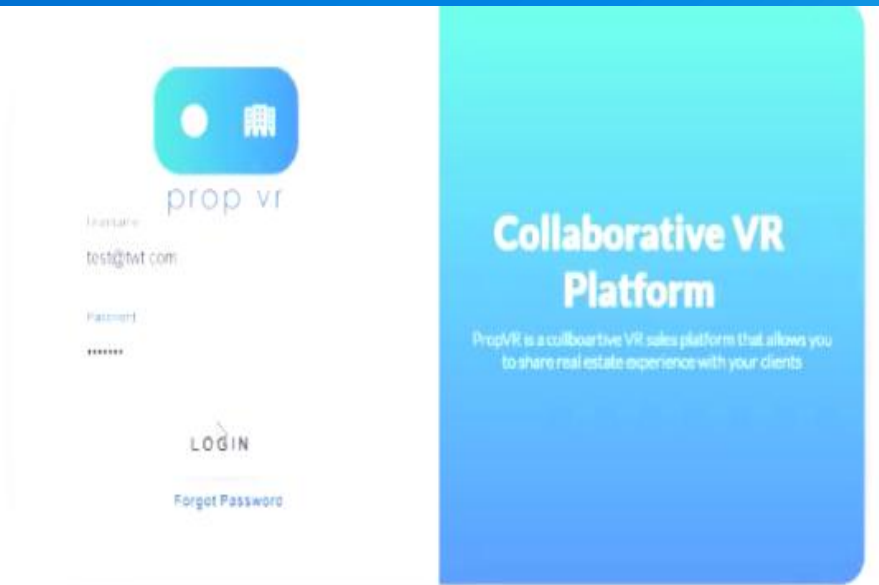


Sales Tool

- Select the Project
- Fetch the images of that project.
- Cursor is the component which is use to click on sky.
- When user click on the sky these cursor will intersect on the sky which gives intersection point.
- Find the shortest distance between intersection point and 3D sphere which we placed in creation tool.
- Based on this shortest distance image will be changed. These will provide walk through effect.

- Now share the link to customers.
- If the customers join using these link. They are connected in virtual room.
- Virtual room will created with the help of web rtc protocol.
- Now sales person start their sales session.
- Multiple customers can join in same room.
- Information will be shared to customers using broadcast.

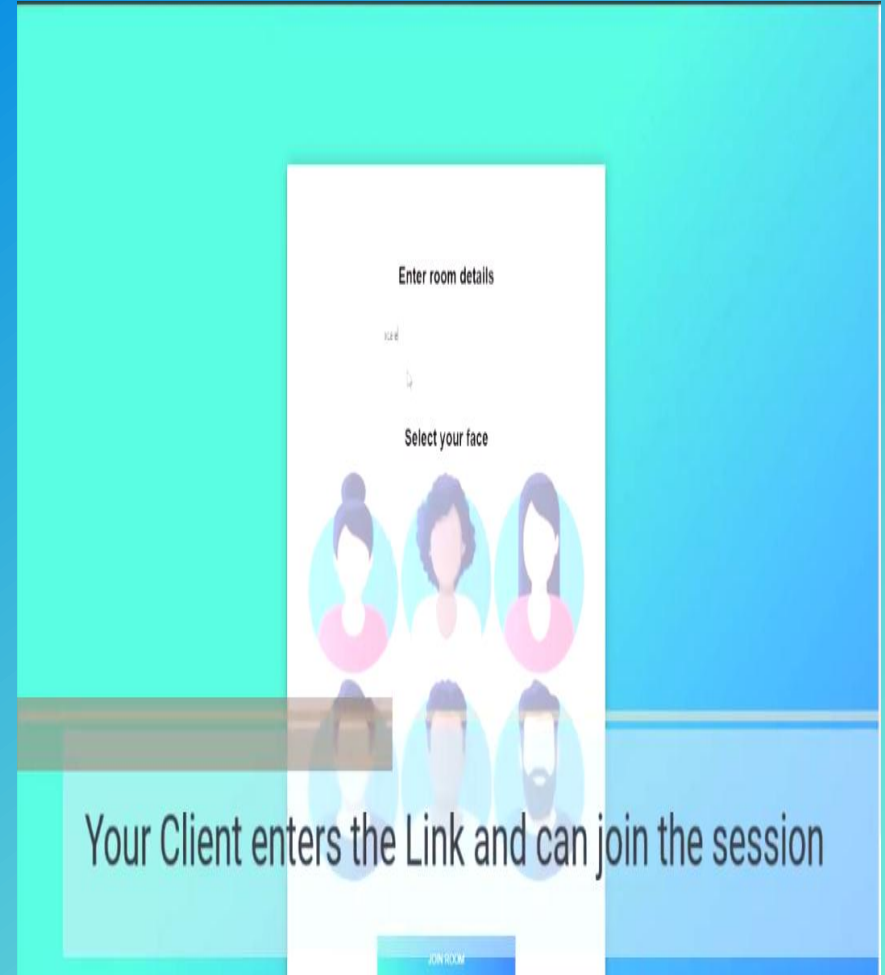
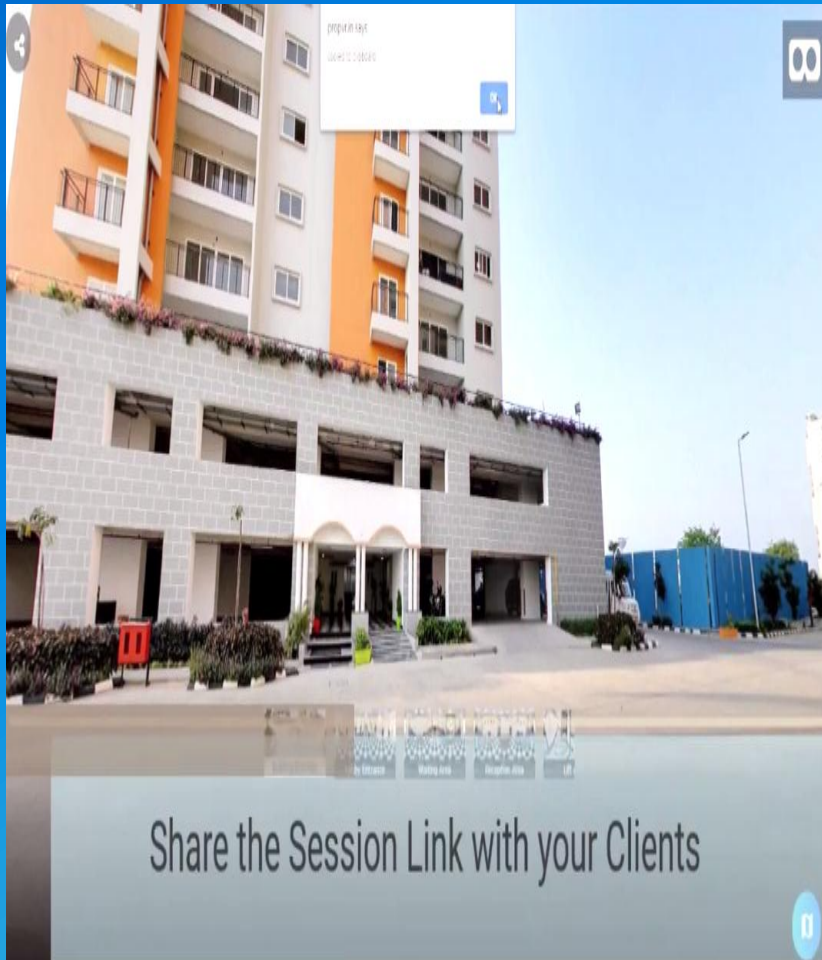
Output



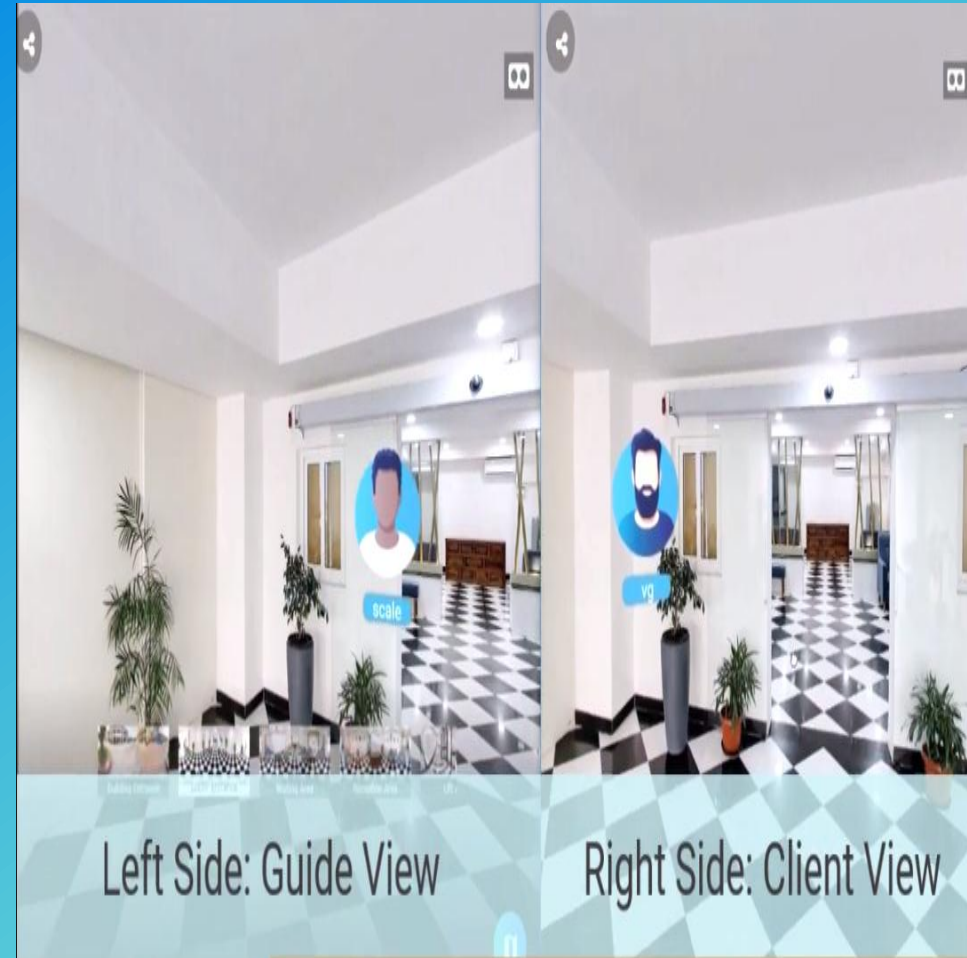
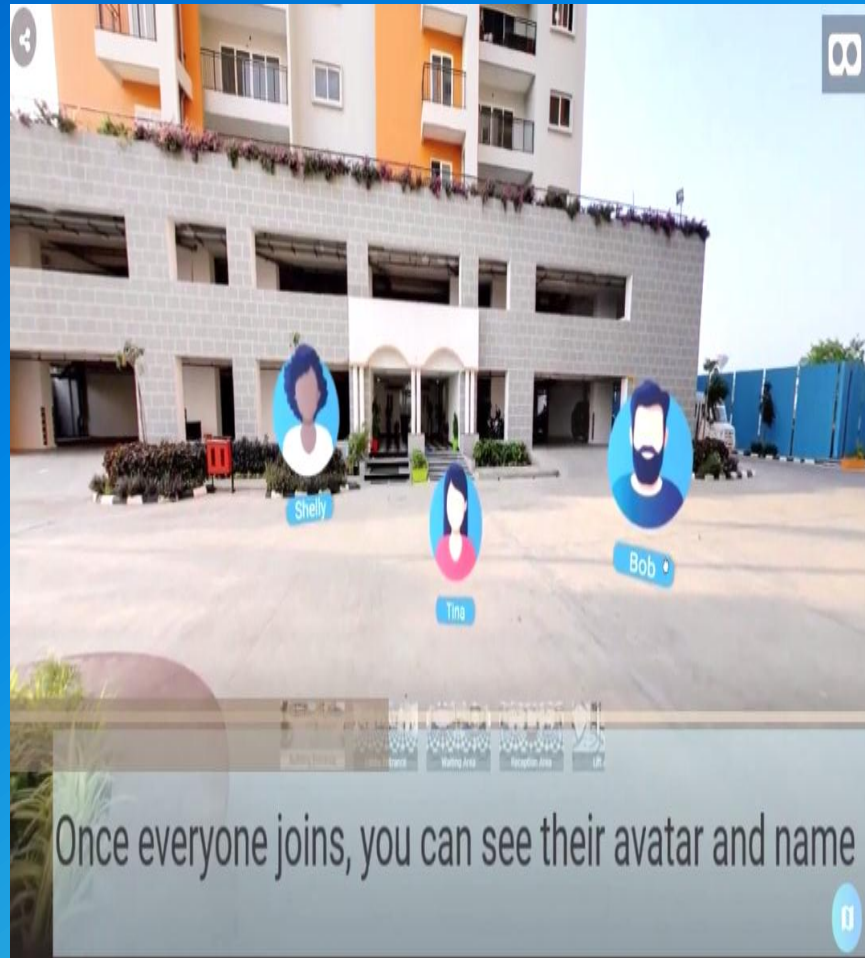
Login with your Sales Details



Output



Output



Web Embed Tool

- Same functionalities are used as I mentioned in sales tour.
- In this tool there no network webrtc protocol.
- This tool is used by sales person on their own website.
- In this tool Google Analytics will be included.

Uses

- Generate more Leads on sales person website.
- Engage customers in a much better way.
- Increase Brand value of sales person website by being innovative.
- Save time and money in managing and converting leads.

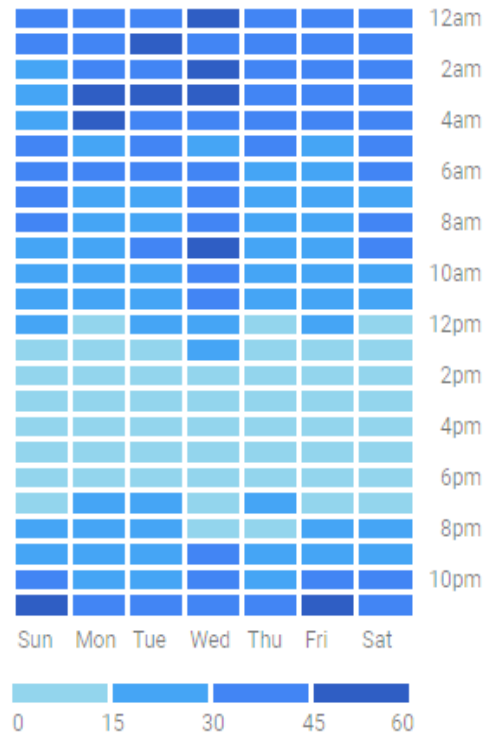
Google Analytics

Following data will be collected from the web embed tool:

- User Location.
- Tracking the intersection of each user and amount of spent on each image by user will be collected.

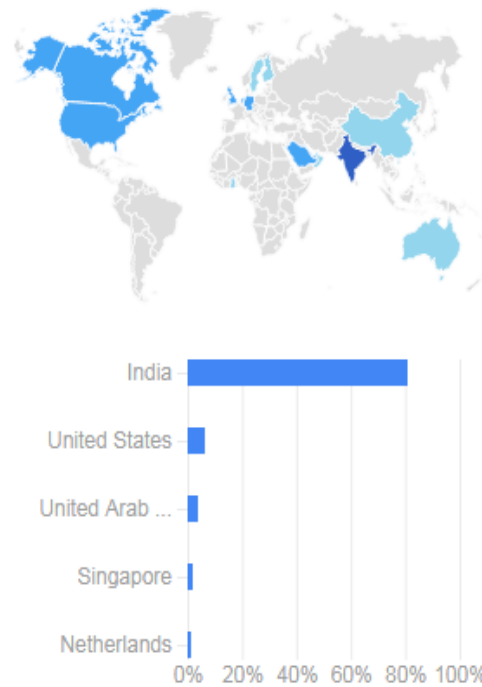
Output

Users by time of day



Last 30 days ▼

Sessions by country



Last 7 days ▼

[LOCATION OVERVIEW](#) >

Sessions by device



Mobile

54.6%

↓ 16.3%



Desktop

44.5%

↓ 25.5%



Tablet

0.9%

↓ 46.2%

Last 7 days ▼

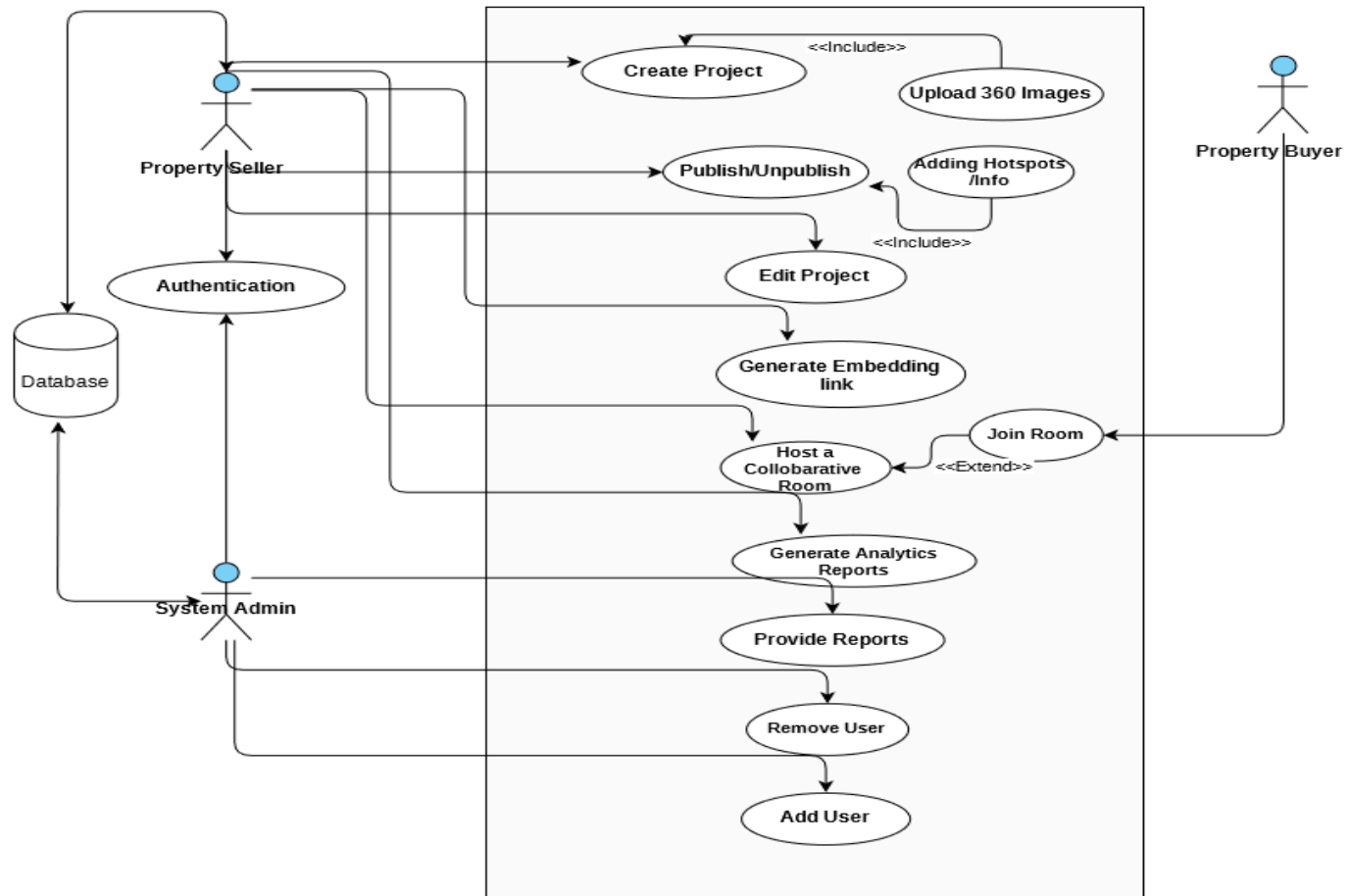
[MOBILE OVERVIEW](#) >

Output

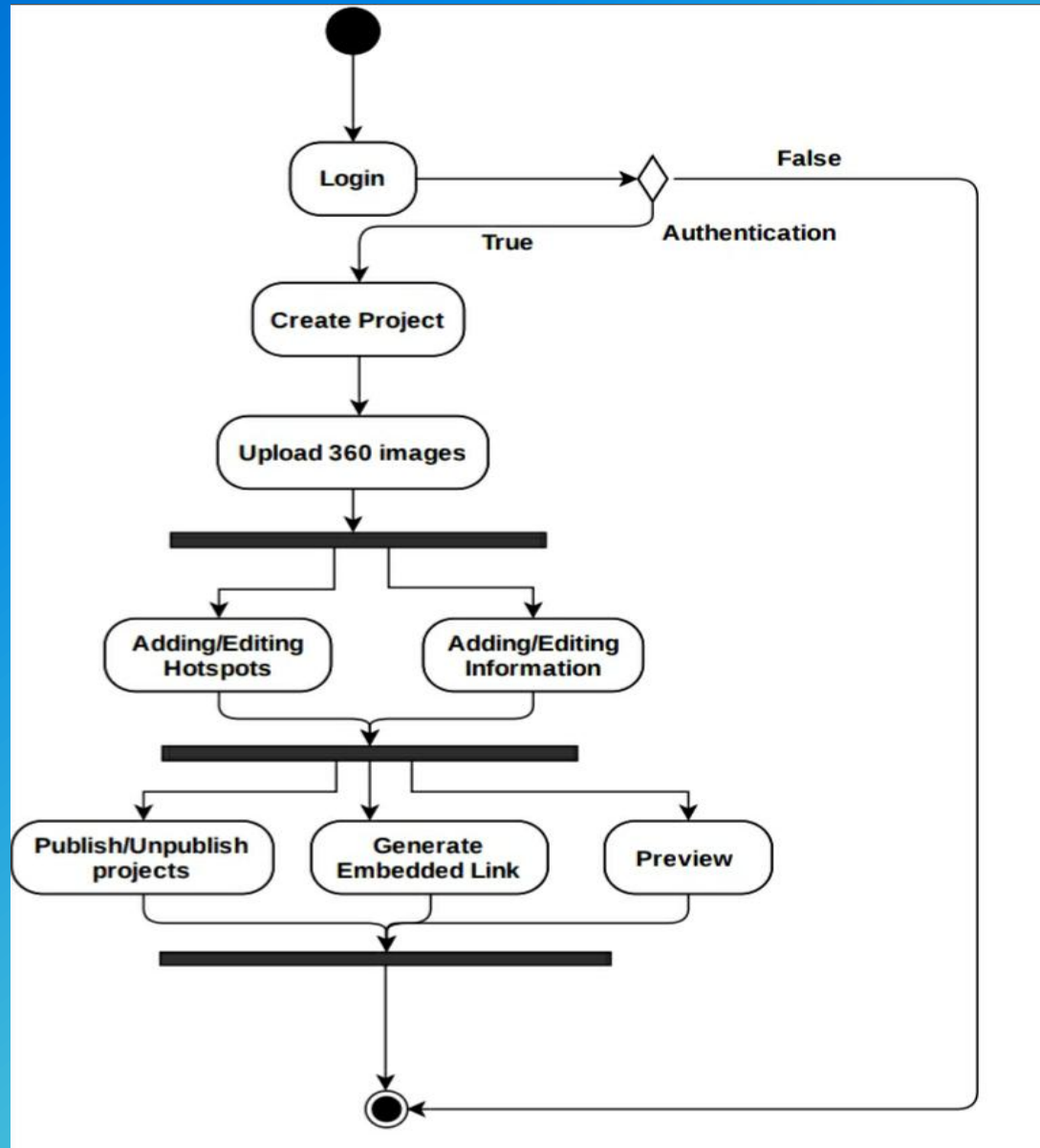
<input type="checkbox"/>	Event Label ?	Total Events ? ↓	Unique Events ?	Event Value ?	Avg. Value ?
		493 % of Total: 68.66% (718)	350 % of Total: 70.85% (494)	5,752 % of Total: 67.69% (8,497)	11.67 Avg for View: 11.83 (-1.41%)
<input type="checkbox"/>	1. Gate	103 (20.89%)	69 (19.71%)	2,298 (39.95%)	22.31
<input type="checkbox"/>	2. Outdoor 1	70 (14.20%)	53 (15.14%)	765 (13.30%)	10.93
<input type="checkbox"/>	3. Outdoor 2	65 (13.18%)	47 (13.43%)	543 (9.44%)	8.35
<input type="checkbox"/>	4. Outdoor 3	36 (7.30%)	25 (7.14%)	268 (4.66%)	7.44
<input type="checkbox"/>	5. Aerial View 2	32 (6.49%)	20 (5.71%)	188 (3.27%)	5.88
<input type="checkbox"/>	6. Podium 5	32 (6.49%)	21 (6.00%)	258 (4.49%)	8.06
<input type="checkbox"/>	7. Podium 4	30 (6.09%)	17 (4.86%)	238 (4.14%)	7.93
<input type="checkbox"/>	8. Aerial View 1	29 (5.88%)	22 (6.29%)	364 (6.33%)	12.55
<input type="checkbox"/>	9. Podium 1	29 (5.88%)	23 (6.57%)	296 (5.15%)	10.21
<input type="checkbox"/>	10. Aerial View 3	23 (4.67%)	15 (4.29%)	177 (3.08%)	7.70

Show rows: 10 ▼ Go to: 1 1 - 10 of 12 < >

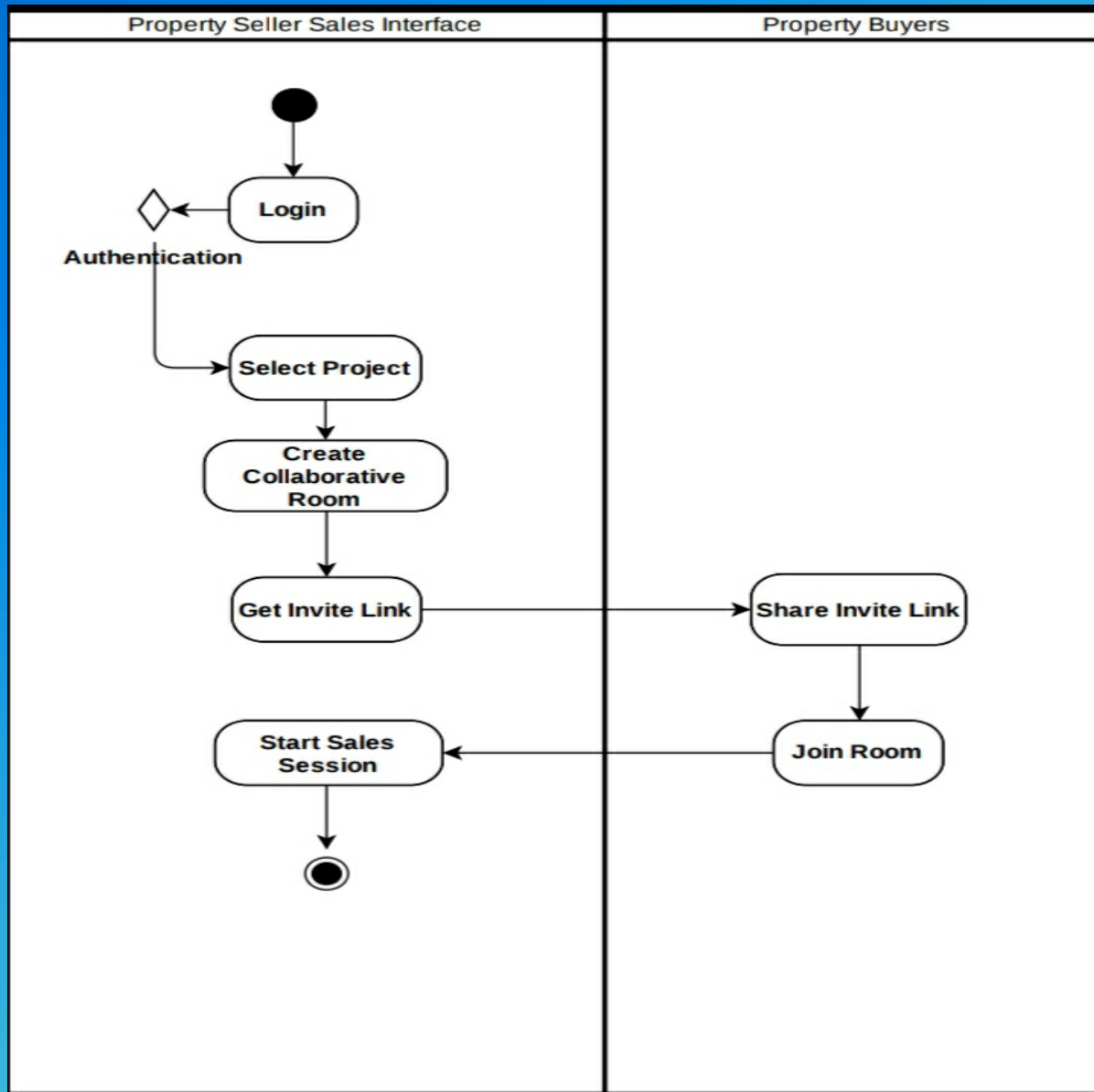
Use Case



Activity Diagram – Creation Tool



Activity Diagram – Sales Tool





Thank You

