CONCEPTUALISATION DESIGN AND DEVELOPMENT OF A MOBILE VR SIMULATOR BASE

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Product Description:

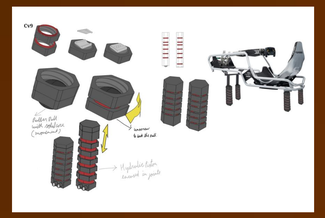
The Product is a type of accessary for current playseat users that can easily support not just playseat but most Cockpits. The product is essential for Playseat users as the cockpit in playseat is not very wide and has complete metal body this leads to few major concerns.

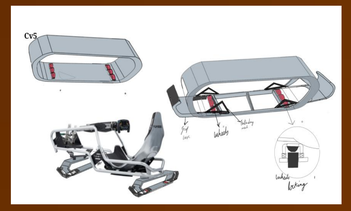
Problems-

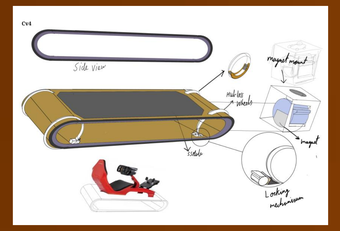
- The narrow body is at high risk to topple by the driver's unbalanced movement.
- If the metal body is left directly on floor this might cause damage to both the cockpit and the floor underneath.
- Most Playseat platforms are sturdy, but it is hard to move them.
- None of the playseat base are modular hence provide very few functions.

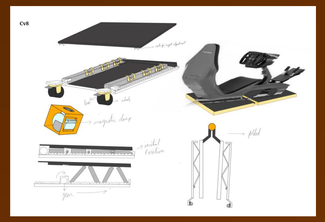
Solutions-

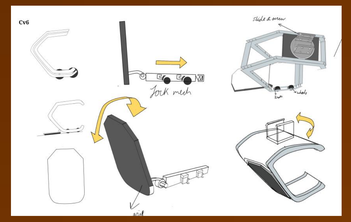
- Design a base that can prevent the frame from toppling by increasing the surface area.
- The base will provide the frame with sturdiness while being able to be mobile.
- Necessary slots and mounts to make the base modular so it can provide more than basic functions.

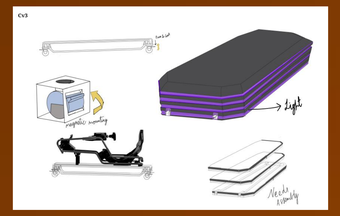


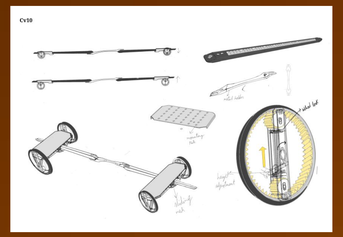


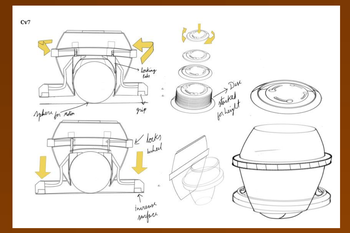


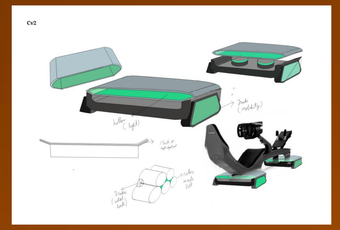












Sr No.	Parameters	Cv1	Cv2	Cv3	Cv4	Cv5	Cv6	Cv7	Cv8	Cv9	Cv10
1	Stability	1	1	1	0	1	1	1	1	1	0
2	Reliable mobility	1	1	1	1	1	1	1	1	0	1
3	Reliable locking	1	1	1	1	1	1	0	1	0	1
4	Easy Manufacturing	0	0	1	0	1	1	0	0	1	0
5	User Assembly	1	0	0	0	1	1	1	0	1	0
6	Modularity	1	0	1	1	0	0	0	1	1	1
7	Branding Visibility	1	0	1	0	0	0	0	0	0	0
8	Height	1	1	1	0	0	0	1	1	1	1
9	Portability	1	1	0	0	1	1	1	0	1	0
Total		8	5	7	3	6	6	5	5	6	4
	Rank	1	6	2	10	3	4	7	8	5	9

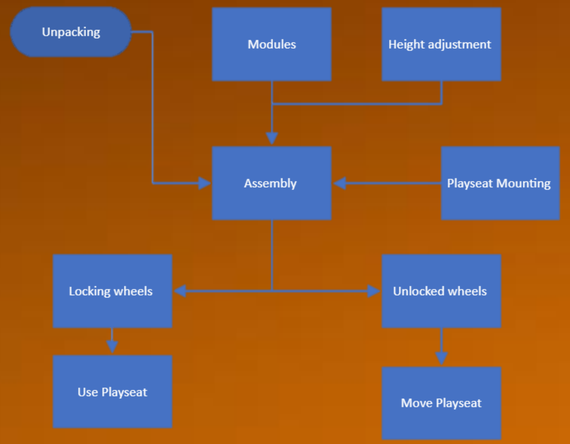
Value	Scheme
0	Bad
1	Good

According to analysis the concept with highest ranks are short listed for further design stage.

Customer requirements:

- No scratch or damage to the floor
- Fit the gaming Ambience
- Easy to move
- Hight adjustable or of 30 cm height,
- Sturdy while in use
- Able to move through standard doorways
- Easy to maneuver
- Able to stand small impacts with walls
- Modularity to increase functionality
- Customizable appearance
- Enough space for branding.

Functional Structure



Market Research:

The gaming simulator market size was valued at $4.04 billion in 2020 and is forecasted to be $9.99 billion by the year 2027. The market share of driving sim is estimated to be about 70% which is $ 3.9 billion in 2022 with annual growth of 12.1% till 2027.
From the data on Sim wheel users market size of potential buyers is identified. SOM= £0.7- 1.2 million if product is prices at £100-150.

Final Design