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MISSION STATEMENT

Design a **dynamic, engaging and visually pleasing** display that accurately **models growing data** available to **increase awareness** regarding the growth and achievements of the OEDK.

MOTIVATION

- Brings a sense of **accomplishment and pride** to users of the OEDK
- Fosters **relationship** between students and the OEDK institution
- Increases **transparency** to prospective students and potential company partners and sponsors

PREVIOUS SOLUTION



Last semester, a previous ENGI 120 design team attempted to solve this problem.

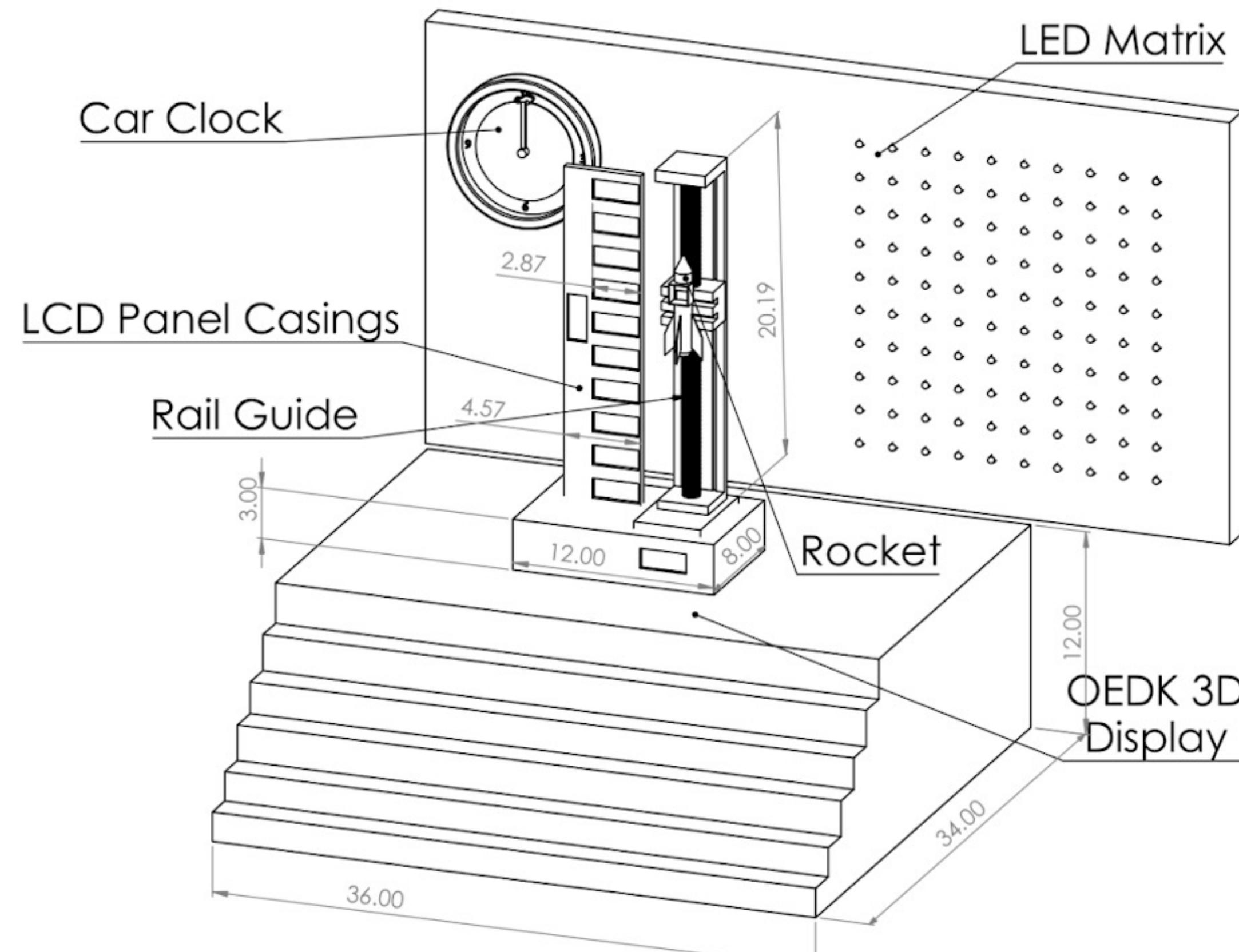
Downfalls:

- Inaccurate
- Not visually appealing
- Hard to interpret data

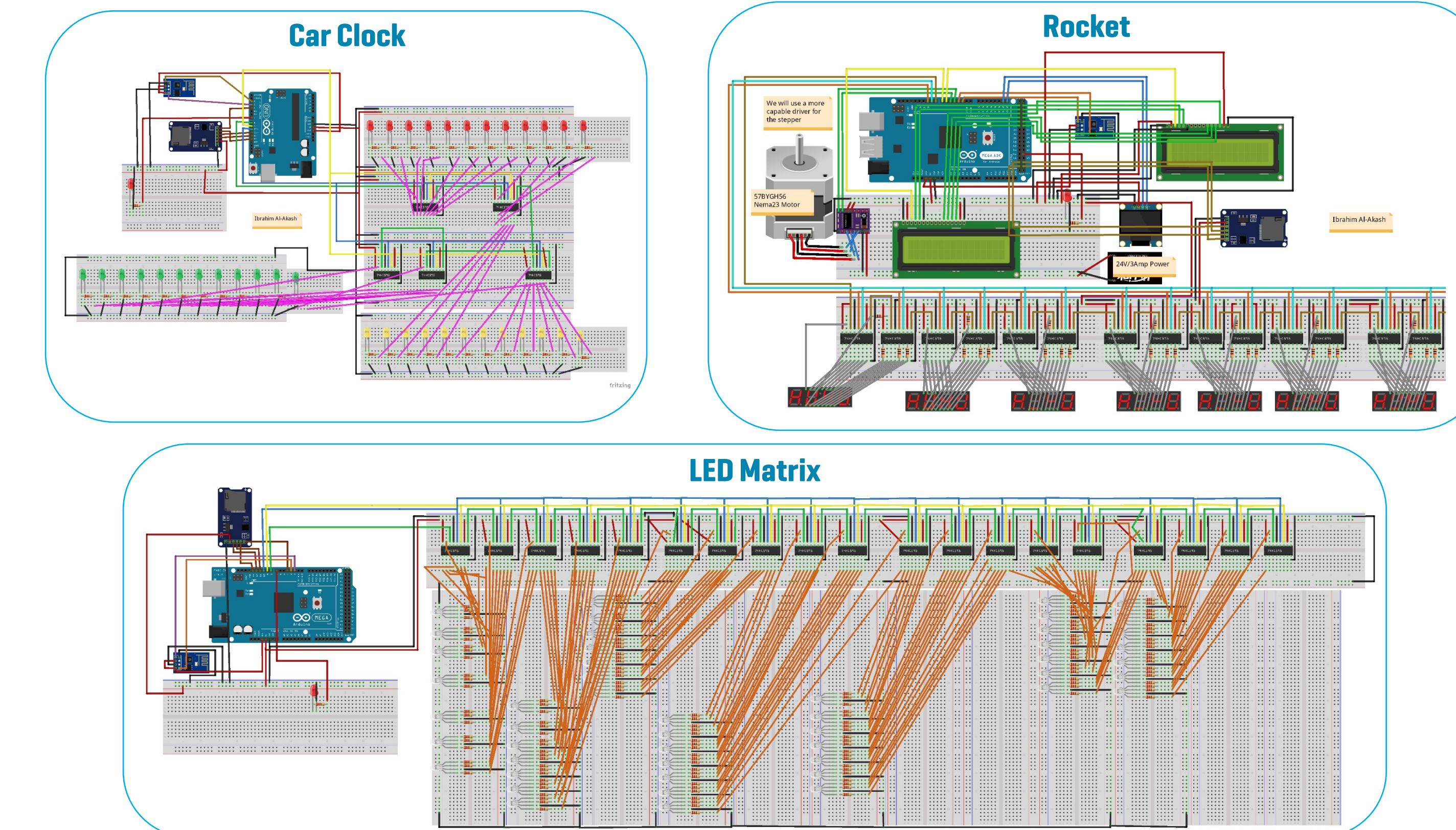
DESIGN CRITERIA

Type	Criteria	Target
Constraints	Safety	No sharp edges, hazards, or falling pieces
	Accuracy	Within $\pm 5\%$ error
	Intuitive	Scores average ≥ 4 on UDS
	Visually Appealing	Scores average ≥ 4 on UDS
Objectives	Engaging	Scores average ≥ 3 on UDS
	Durable	System maintains functionality for one semester
	Updateable	Must update display once per semester

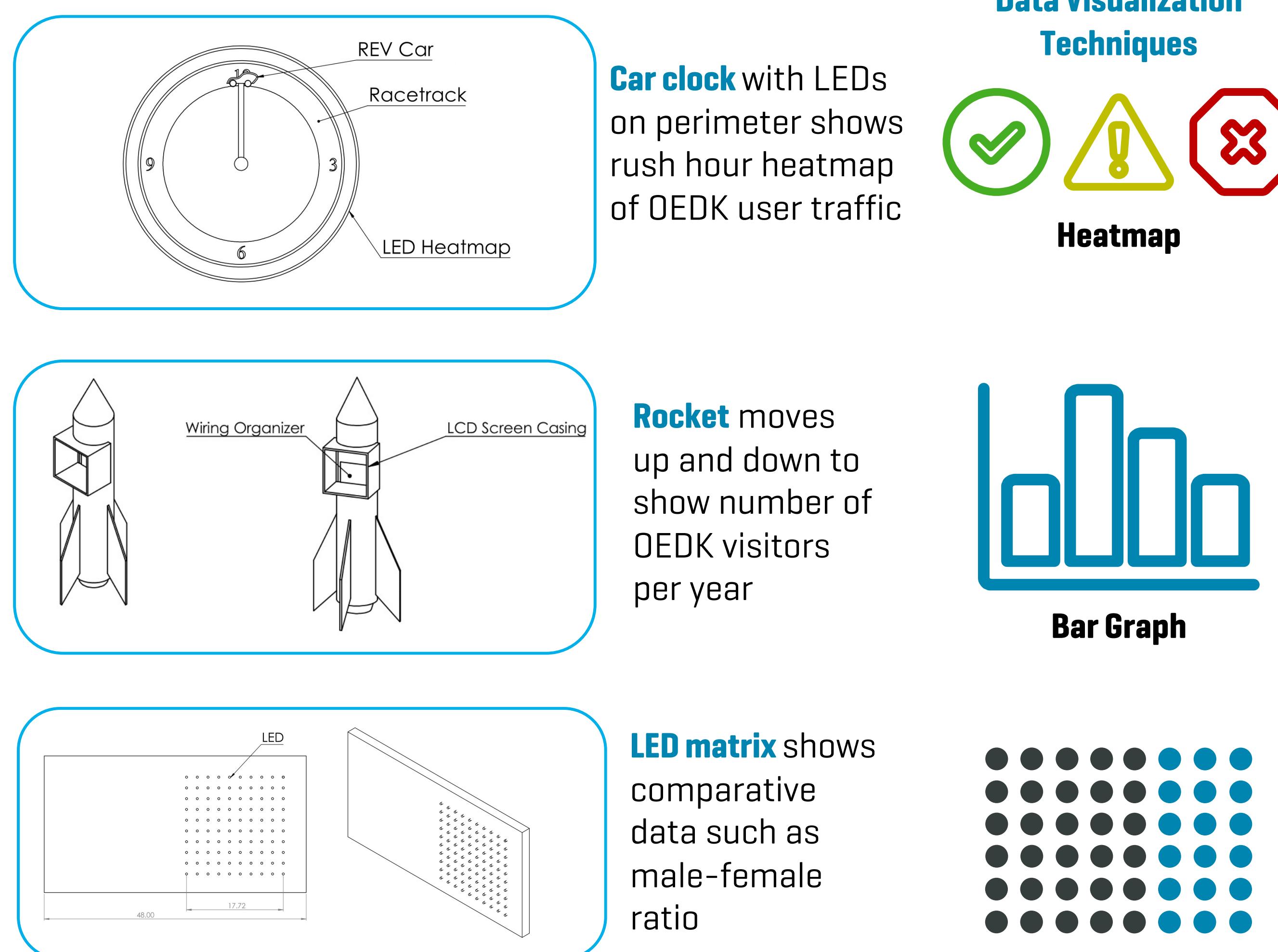
CONCEPTUAL DESIGN



CIRCUIT DIAGRAMS



FEATURES



RESULTS

Component-Wise Tests		
Rocket	Accuracy	Durability
	99.05%	Pass [0.95% error]
	100%	Pass
	100%	Pass
LED Matrix	Updateability	
	98.75%	
System-Wide Tests		
Safety	Drop Test	Intuitive
Passed Inspection	No broken parts	4.4 UDS
		4.8 UDS
		4.1 UDS

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- Design Mentor** – Olivia Goganian
- Writing Mentor** – Caleb Hesita

FUTURE WORK

