

Transportation Initiative Jan12

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Electric Rickshaw is the intellectual property of <https://twitter.com/TeslaAndDoge>



Initiative: Innovation in Transportation

Epic: Understanding the First and Last Miles

Epic: Electric Rickshaw

Epic: Autonomous Electric Rickshaw

Metropark Train Station



Parking Lot



“Train Station.”

“Just like our Tambaram and Chromepet.”

“People drive to the train station and park their car; then take the train to work.”

“Here, most of them ride bicycles to the train station.”

“That was your grandpa's time period; now, motorcycles or car.”

“Whatever we build for America, we could use it here too.”

“Maybe. We will build an electric rickshaw for First Mile Transportation.”

“What is the First Mile?”

“From your home to the train station.”

“Do they have Last Mile too? From the train station to the workplace”

“Yes. They do.”

“They could import Electric Rickshaws from China.”

“They could. But the Rickshaws need to be autonomous.”

“Autonomous means?”

“Self Driving; drive on its own, without a driver.”

“That would be scary!”

“We have all the technology; we will make it safe.”

“Do we buy an electric rickshaw and add IoT on it?”

“If we build from scratch, we would have better control.”

“IoT is simple; but mechanical and electric would be challenging.”

“Mechanical and Electrical are like physical bodies.”

“...and IoT is soul?”

“IoT makes the rickshaw move around safely.”

“Do we have sensors on the rickshaw?”

“Mostly cameras. We build Volumetric Occupancy.”

“Is it a three dimensional image?”

“All stationary and moving objects would be in three dimensional form.”

“We could ask Anna University auto and other departments to build the physical structure.”

“We shall work on the soul of the machine.”

“Do you mean IoT?”

“We could take a toy car and add IoT on it.”

“It would be fun when the toy car moves from our department to the mess on its own.”

“Once the electric rickshaw is built then we could go to the mess on it.”

“Could we take it outside?”

“Not on the GST Road; may be inside Chromepet.”

“In India, we drive on the left side of the road.”

“Oh my goodness; what do we do?”

“Just like factory settings, they need to select the right side or left side.”

“Where do you get all these pictures?”

“One of my friends is building an electric rickshaw from scratch and that person shared the developments; it is open to all.”

“Would that person be interested in buying the soul of the machine from us?”

“Sure. Not only that person; here OLA, Uber and others also.”

User Stories:

- Build mechanical frame
- Build Transmission
- Install Battery

Application: Autonomous Electric Rickshaw for First and Last Miles

This document is a collective effort of 31st batch students of Madras Institute of Technology, Chromepet, Anna University, Chennai, Tamil Nadu, India.

Mission: develop innovation and entrepreneurship in student community

Innovation: Needs have always been there; most of the needs are satisfied; some of the needs are not satisfied yet. Unsatisfied needs are the seeds for innovation.

Entrepreneurship: Innovators create wealth; two Phd students developed Google Search Engine at Stanford; Google still shares revenue with Stanford; We could develop both innovation and entrepreneurship at the university. Students working on an epic could go out and start an industry.

Exploration is **the act of searching an unfamiliar area in order to learn about it**. It involves the discovery of new information; students and gurus gather to explore the sports initiative; both hardcore technical students as well as entrepreneur students participate in the exploration.