# CS Models

1. AC Slow Charging (Portable)
2. AC Fast Charging (CS)
3. DC Fast Charging <BETA>

# CS Design

1. Round edges
2. Internal Triangular structure
3. Hologram Display
4. Primary Display

CS Locations

1. Building Complex
2. Rickshaw Stands
3. Public Places

User Interaction

1. With APP
2. Without APP
   1. RFID (Prepaid)
      1. Card
      2. Ring
      3. Bracelet
      4. Pendent
      5. Keychain
      6. Sticker
   2. LAN

App Features

1. For customers
   1. Book a CS
   2. Find CS near me
   3. Recharge RFID tag
   4. Scan QR code to make payments
   5. Enter Vehicle details
   6. Interactive Statistics
      1. Units consumed
      2. Total Energy consumed
      3. Frequently used CS
      4. Total charging Duration
      5. Current charging status
         1. Voltage
         2. Current
         3. Battery percentage
         4. Estimated charging time
         5. Approx. Amount to full charge
2. For Shopkeepers
   1. Notification after a successful payment transaction by the customer

# CS Display Entities

1. Voltage
2. Current
3. Approx. Charging Time
4. Battery Percentage
5. QR Code
6. CS unique Id

CS Working

Ideal state:

Hologram (Lights = Green, Display = Available):

Primary Display():

<Welcome Screen>

Current date and time, News Headlines, Cricket match scores, Advertisements

Button: Click to start charging, check RFID tag status

Vehicle details: <Display a QR code > scan to transfer details

Or Tap RFID Tag

Confirm the detail for the vehicle to be charged

Enter the charging amount or the percentage of battery to be cgarged

Connect the charger

Click start charging <Charger connector locks>

Display: Charging status and stats

Buttons: Stop Charging

<Charging completed>

Hologram (Lights = Yellow, Display= Battery percentage)

Make payment button

Select the payment option

Scan the QR code to complete the payment using APP or RFID tag

# Incentives

1. Loyalty points
   1. Charging Cycles
   2. Workout
   3. Initiative to prevent Climate change
2. Advertisements

# Conditions

1. Disconnect power if
   1. Charging cable is unmounted by the user
   2. Water inside the CS
   3. Overheating/Thermal Shutdown
   4. Charging cycle is completed.
   5. Power Failure
   6. Manually turned off by the user

# Payment

1. Using App
   1. UPI
   2. Netbanking
   3. (Saved) Debit/credit cards
   4. GPay
   5. Digital Wallets
2. Prepaid RFID cards
3. LAN Portal

RFID Cards

Every RFID tag will have a unique ID written on it.

How to recharge: Visit <website> and enter the unique ID. Verify the Current status, username and balance displayed on the screen and select the option to recharge the tag, proceed to the payment portal and complete the transaction. The recharge amount will be added to the RFID tag.

How to use: Scan the tag to validate the status (Remaining balance) before starting the charging cycle After charging the EV at the CS tap the RFID tag while making the payment. The given amount will be deducted from the tag and the balance will be displayed.

# Miscellaneous

1. Charging Circuitry in a box with exterior Pinouts (CPU model)

Easy to troubleshoot and repair.

1. Hologram Display for Battery status

# Abbreviations

1. CS – Charging Station
2. EV – Electric Vehicle