Universal Car Project
Problem

- Collaborate on the web to design and specify a “universal” platform upon which a wide range of functional vehicles can be designed for developing countries
Team Objectives

- Create a Standards organization that will design and specify a universal chassis

- Solicit contributors within and outside the automotive industry to collaborate on the design
Methodology

- Tech Team – Create a Website, drive traffic to the website through social Media
- Engineering Team - Research Automotive Designs, Design two sample chassis
Team Organization

Engineering Team

- Justin
  - Kaleo
  - Chris
  - Bahar
  - Sooraj

Tech Team

- Andrew
  - Karthik
  - Dwayne
  - Erfan
  - Daniel
The Universal Car Project

The Goal:
The Universal Car Project's goal is to help people (whether as individuals, or working as part of a company) to design and build their own vehicles. Our goal is to create a "universal" platform upon which our collaborators can build vehicles of their own design. This universal platform will allow a wide range of vehicles to be designed and built to meet the needs of developing countries or just to allow someone to create their dream car. Anyone with manufacturing expertise or even just an interest in automobiles can help design the basis chassis and then utilize the platform to design fully functioning vehicles.

The Universal Car Organization (UCO) will specify the basic chassis which can be mass produced at low cost. This is an "open source" design which anyone can utilize with a free license from the UCO. The UCP will specify the locations of the mounting points for the suspension, engine, and transmission along with a gross vehicle weight rating for the chassis. The basis chassis will allow changes in wheelbase and width, and allow the designer to modify the basic chassis to meet their needs. The individual or manufacturer can choose use the universal car chassis to create vehicles which can range from a small sports car, light truck or SUV to a lightweight electric car. The open concept also allows for most current and past automotive parts to attach to the chassis at the specified mounting points or by creating an attachment to the specified points so the part can properly attach.

Website - http://universalcarproject.com
Welcome

ANNOUNCEMENTS

FAQs
by TechLeader » Tue Jul 05, 2011 7:26 pm

About Us
by TechLeader » Thu Jun 30, 2011 7:07 pm

STATISTICS

Replies: 0
Views: 6

Replies: 0
Views: 11

LAST POST

Tue Jul 05, 2011 7:26 pm
by TechLeader

Thu Jun 30, 2011 7:07 pm
by TechLeader
Tech Team Results

- Social Media
  - http://www.youtube.com/universalcarproject
  - http://twitter.com/ucarproject
Engineering Team Results

Universal Space Frame Chassis

Universal Ladder Frame Chassis
Engineering Team Results

Large leaf spring for either a small truck or SUV on the Universal Chassis

Macpherson Strut on the Universal Chassis

Small leaf spring for a car on the Universal Chassis
Obstacles

- Finding Part Dimensions
- Obtaining server space and create a presentable website in a limited amount of time
- Creating a relationship with the only automotive manufacturer in Chicago (Ford)
Ethical Issues

- Safety of finished cars
- Pollutants and carbon emissions from more vehicles on the road
Conclusion

- Web and Social Media presences have been established
- Developed a sample chassis for the universal car project
Future Intent

- Visit Automotive Factories and Engineers – Subaru and GM
- Find and work with an automotive company to finalize a design and pre-fabricate a chassis
- Create a richer web interface to bring more traffic and interest from prospective supporters