Element F: Consideration of design viability [1]

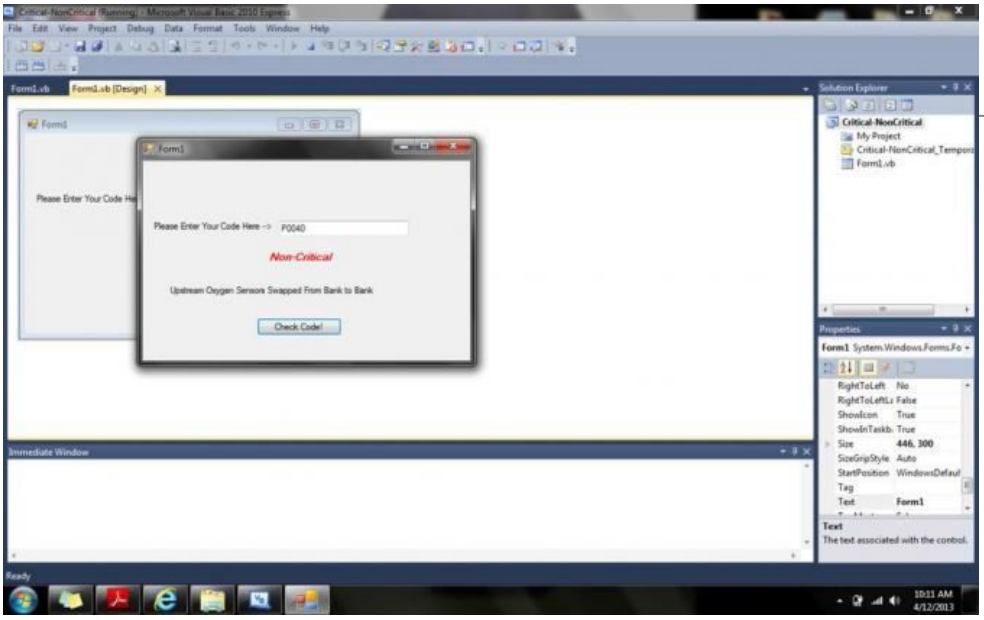
Throughout this design process, analyzing our competitors has helped us validate our problem. Additionally, our analysis made us more aware of the products already created and how ours would compare. Thus, we developed a market analysis which answered questions such as: who are our competitors? What is the market size? And who are our customers?

- Competitors (Auto Repair Shops)
    - Midas, Mieneke, Blain's Farm and Fleet, Car-X, Ford Auto-Body Shops and other local body shops.
    - Market Size
        - D.I.Y. Mechanics – Do it yourself Mechanics
            - Yearly Annual Spending = $30 Billion (consists on anything purchased outside of repair shops).[1]
            - Who are our customers?
                - Auto retail stores (O'Reilly, Napa, and AutoZone)
                - Car Manufacturers
                - Those who do not understand the mechanics of a vehicle enough to repair it themselves.

Alongside this market research we researched patents and existing products that consumers are willing to purchase. Upon this research we discovered that typical OBDII readers range from $25-100. These prices are typical costs for these types of products, and the consumers are willing to purchase these products. Additionally, there are app's out there that give car diagnostic information when connected to a Bluetooth OBDII reader. Full app's may cost from $5-10. In contrast to our product, our solutions fit within these current solutions. Our solution would comprise of an app (computer program) and a basic Bluetooth OBDII reader. The OBDII reader is under $20 which is much less than competitive OBDII readers. Additionally, the app would range $5-10 like current app's.

Overall, our final product would be sold as an app that is capable of being loaded on any Bluetooth capable device. It would be sold through the Android, Apple, or Google Market as an app. These app markets make our solution readily available to all consumers with SMART technology with the capability of downloading the app. This is a reasonable place to distribute our product, because it serves a large consumer market. In this market our product is available to everyone, with the ability to purchase the full app for an inexpensive price.

We feel our final design is viable because it competes with existing products while adding more essential information. Our final design as a program reaches out to a large market which is crucial to any viable product. Therefore, our prototype serves as proof that our solution is viable.



[1]

"Find Your next Car." New Cars, Used Cars, Car Reviews and Pricing. N.p., n.d. Web. 9 Nov. 2012. <**http://www.edmunds.com/> (http://www.edmunds.com/>)** .