Problem:

Regular health exams and tests can help find problems before they start, so the chances for treatment and cure are better. However, for all kinds of reasons, people sometimes are not able to or do not go to the hospital and get a health check-up, which may cause permanent damage to the body.

Analysis of Problem:

In New York, the busiest city of the world, a lot people do not have time to go to the hospital for a monthly health check. In Florida, where the highest senior population rate occurs, many elders can barely walk to the hospital for a body check. Billions of workers in China cannot afford the basic health examinations. In Africa, most tribes do not have doctors or nurses who know how to use the modern medical equipments. The world desires for a solution that allows all kinds of individuals to do a fast health check easily and frequently. On the other hand, the doctor in the hospital will provide more accurate information; also those complicated medical tests cannot simply be done by some unprofessional at home. We still need to go to the hospital once in a while to have a thorough check.

Suggested Solution:

In the market, there already exist many iPhone health accessories such as blood pressure monitors, heart rate monitors and sleep sensors. These apps and devices are quick and easy to use and they all do great jobs in terms of testing the relevant data. However, a normal person without much knowledge about medicals can find it intimidating just by staring at some number with a fancy graphics. Even some do explain what the data stand for, it is not convincing that the phone tells your health just by looking at one specific data of your body. Therefore, as a compromise, more of a better examiner, we will program an app that combines data collected by different devices (the users can choose the type of accessories they need, say, seniors tend to need the blood pressure monitor and heart rate monitor while young ladies may want the WiFi body scale and Nike + iPod sensor) and calculates the person’s health status according to the user’s age, gender and even race. Of course, we cannot one hundred percent rely on a mobile and some fixed formulas. The human body, as well as the science itself, changes all the time. We’d better to have a quick check for our body frequently but we also need the professional doctor to review the data sometimes to make sure your body is working fine. Home Self
Check-ups will help the doctors reduce the mass of appointments so that they can be more focused on individual cases. Also the data for individual can be sent to the family doctor from the mobile through Internet and it will definitely help the doctor to trace back your health history and make a better decision for you. Moreover, the users can volunteer to share their body data to a secure database so that it will help the researchers to collect data they need in a very fast and inexpensive way thus it may accelerate the development of medical science and other fields.

**Experiment:**

For this app, we need multiple UI for different user types. We can have regular version that faces the public versus the advanced version that high-educated people may want to use. The main difference would be more illustrations for the regular version so that workers, students, the elders and low-educated people can understand, while the advanced version will come with detailed and scientific explanations of why your body becomes slightly sick or better. The user needs to use the selected device(s) to test the body first. The detailed instructions should be shown when using each device. After finishing collecting data, the mobile will process and show the healthiness of the user. If the user’s condition is not well, the mobile will alert the user and help the user to notify the family doctor and make the soonest appointment.

This app, using the devices and the apps that already exist for the mobile, integrates the data and gives the most accurate result. It increases people’s consciousness of their health and helps prevent some severe sickness, and may even cure patients.