Vision Statement
Team SmartRG

Project Title

SmartNetwork

Team Members

Brandon Wicka (Team Lead) - brandonwicka@gmail.com
Jill Farnsworth (Scribe) - jillfarnsworth4@gmail.com
Charles Xie - zuochenxie@gmail.com
Matthew Gordon - mgordon6197@gmail.com
Vince Gandolfo - vgandolfo@comcast.net

Project Description

A mobile application that will display useful statistics and information about your home’s wifi and internet connection. In addition, our app will look to provide other useful innovations like a heat map depicting the strength of your wifi connection in each room of your home.

What problem(s) does the project solve?
- Technicians installing home routers need a tool to maximize Wifi range and solve network connectivity problems.
- At home users can check where their wifi signal is strongest/weakest so they know where to put wifi extenders/repeaters to maximize their home’s wifi capabilities.
- Determining why your internet is being slow

Why is this problem important?
- Most people want their home wifi to work seamlessly without any problems or issues
- Most people do not know why their internet is not working or being slow

How is the problem solved today?
- Users have to call in technicians from their internet service providers to physically come to your home and analyze the issue.
- Users try and figure out the problem themselves.
**Outcome of the project**

Our end goal is to provide a mobile application that allows technicians, and possibly residential users, to test network connectivity across different areas of the home and display network data in order to solve potential connectivity problems.

**Initial project milestones**
- Develop a mobile app (Android) that collects and displays data from a home router
- Allow it to run speed tests and store data in a database on a cloud server
- Be able to display a heat map of Wifi network strength across different areas of the home
- Display statistics and analysis of over-the-top video streams (vstb)

**How do you plan to articulate and design a solution?**

**Implementation**
- Android SDK, and possibly NDK as well
- iOS
- MySQL database
- Iperf3, to get network statistics and information
- SmartRG routers

**Overview the process model you will employ to achieve the milestones**
- Daily scrum meetings
- Weekly (or more frequently) meetings with mentors
- Google Drive for document storage
- Slack/Google Group for team communication
- Github for version control
- Agile workflow process of 2 week sprints