A mixed reality, NFC-based API and game
Project Proposal

TEAM:
Juilee Tushar Chitre
Meghambari Khavnekar
Niharika Maheshwari
Saylee Tushar Chitre
Vidhya Suresh

TAGLINE: 'Rock Paper Scissor'- A classic game with NFC touch

PROJECT DESCRIPTION

The game of Rock Paper Scissors is built on GemaTouch's patented NFC technology. The application will drive users to interact with other user (Beam mode) and explore local environment (NFC tag mode). For example: Freshmen can play this game to discover the different places around the campus. This app will serve as a prototype for developing other gaming and marketing apps for GemaTouch technology.

UNIQUE SELLING POINT OF APP

Local startup GemaTouch has designed technology that embeds NFC sensors inside printed media such as posters and brochures. The users need to simply put their phone near the media to interact with it. The USP of this app will be the interaction with this patented technology.

SOFTWARE AND TECHNOLOGY

1. Android SDK, Eclipse IDE
2. Gema Touch patented NFC sensors
3. PHP Scripting
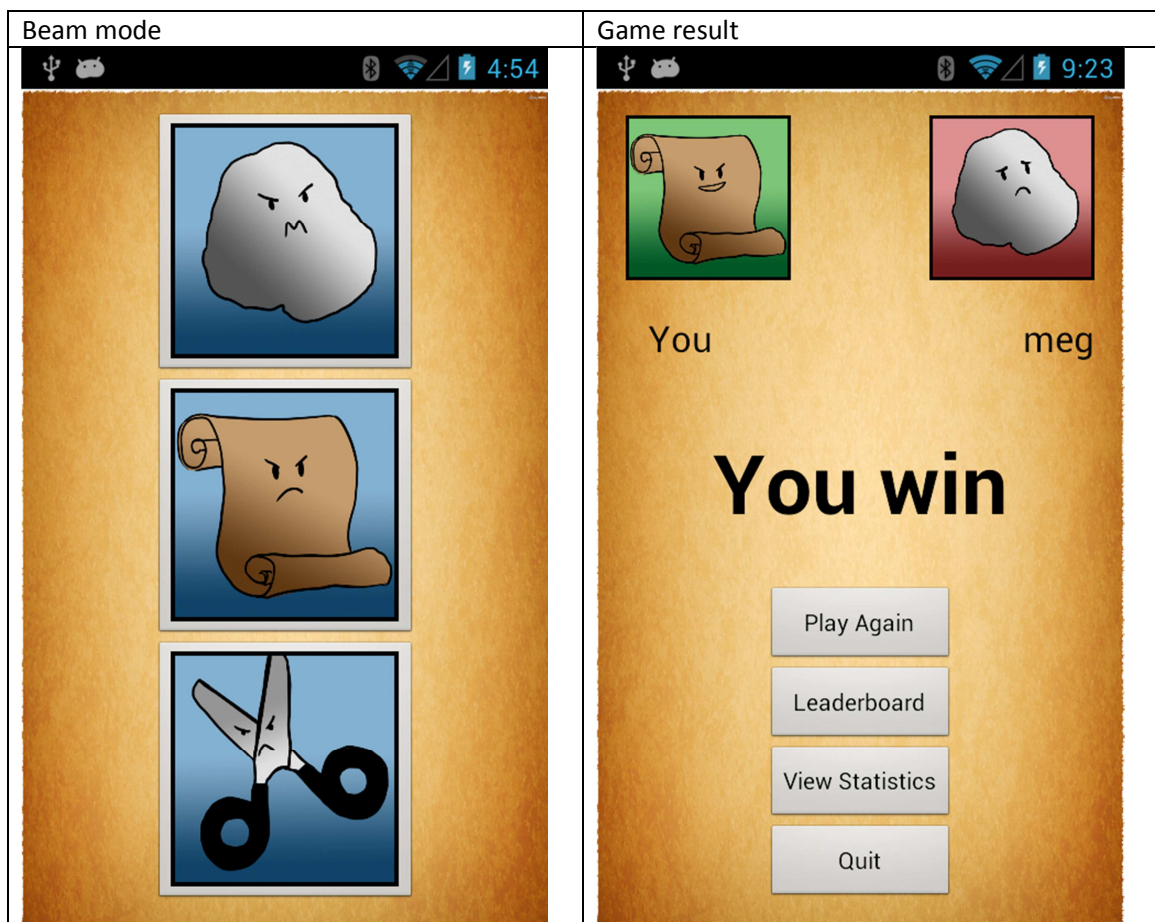4. Online Database (MySQL)
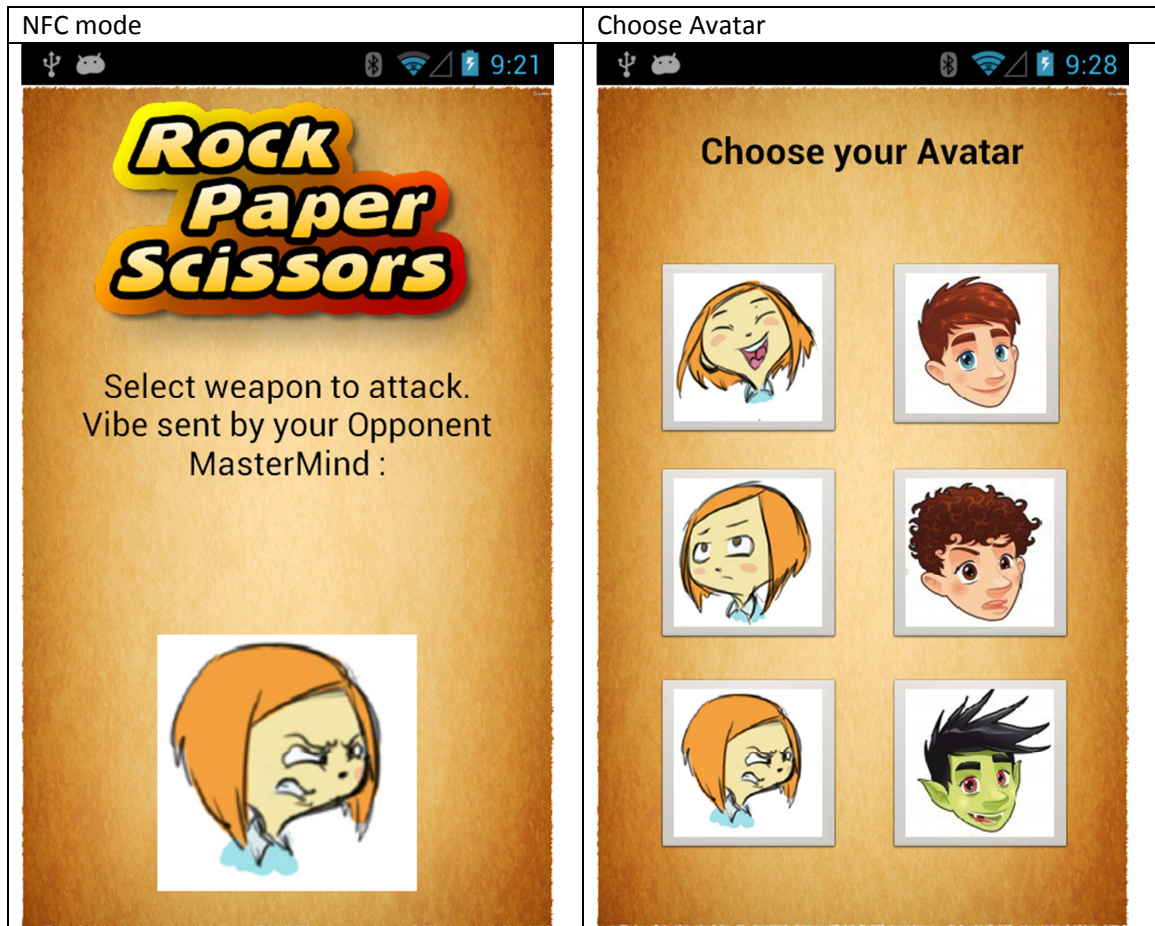5. Server (XAMPP)
6. GitHub

IMPLEMENTATION PHASES

1. NFC Tag Reading and unit testing
2. NFC enabled Beaming and unit testing
3. Database interaction and unit testing
4. Designing Game logic and UI
5. Integrating beaming with the game
6. System testing

GRADING MILESTONES AND PROGRESS

1. Finishing the first 3 phases : 50% grade - completion time 4 weeks
   Completed in 3 weeks

2. Game components (phase 4) : 40% grade - completion time 4 weeks
   Game logic and modes completed in 3 weeks; worked for a week to enhance UI

3. Testing : 10% grade - completion time 1 week
   Completed in less than a week

4. Implementing integration of beaming with the game : extra credit
   Completed in less than a week

APP SCREENSHOTS

Beam mode	Game result

NFC mode	Choose Avatar

FUTURE WORK

- The Big Bang Theory version of Rock-Paper-Scissor-Spock-Lizard
- Multi-player
- Facebook integration

REFERENCES
- http://gematouch.com/
- https://en.wikipedia.org/wiki/Near_field_communication
- http://developer.android.com/guide/topics/connectivity/nfc/nfc.html
- http://www.tappednfc.com/android-nfc-developer-guide/
- http://android-developers.blogspot.com/2011/03/identifying-app-installations.html
- http://developer.android.com/reference/android/app/PendingIntent.html
- http://php.net/manual/en/function.mysql-connect.php