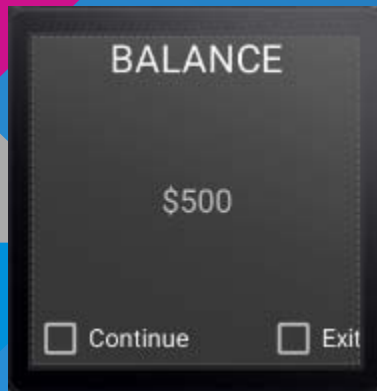


# Smart Watch for Banking Alert



December 3, 2014

Team Watchmen:  
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Jordan Monette,

# Background

## Mobile Banking

-Transactions without visiting a branch



# Advantages

1. Easy Access
2. Robust/Additional Security
3. Persistent Service
4. Fast



# Problem Formulation



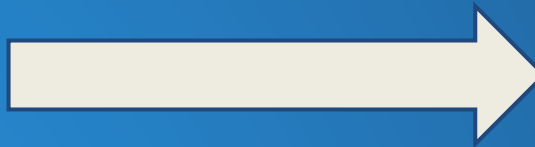
## Problem Formulation (cont'd)



The Watchmen aim to create an app to access common Capital One banking functions (i.e. check balance, pay bills, fraud alerts) on the Android Wear Watch.



Our goal is to provide flexible and useful banking services and functionality to Capital one's customers through the use of an Android wear device.



## Current Status of the Art

- Banks have stand alone applications that must be interacted with by user.
- Find Phone
- Locate App
- Provide Login
- Navigate App on possibly small screen.



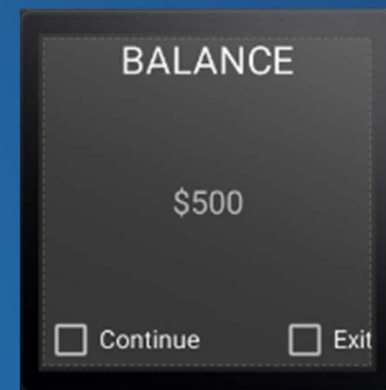
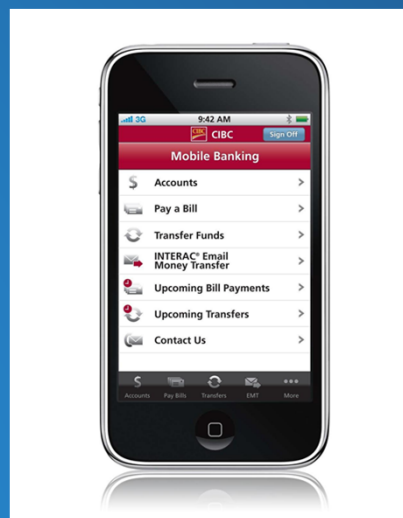
# Design Requirements



- App should be developed using Java language.
- Real customer data cannot be used
- Must be compatible with Android platform
- User-Watch interface time must be <5 seconds



# Which Would You Prefer?





## Option One



### Eclipse programming environment

- Capital One's information system will transmit data from a MySQL database to the user's cellular device.
- The user's information will be filtered on the cellular device depending on the custom settings of desired information to be sent to the watch chosen by the user.
- The desired notifications and command prompts will then be displayed on the square face of the Android watch.



## Option Two



### Android programming environment

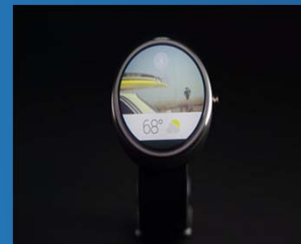
- Capital One's information system will transmit information from a Parse database to the users cellular device.
- The users device will then filter the users information depending on the custom settings of desired information to be sent to the watch chosen by the user.
- The desired notifications and command prompts will then display on the circle face of the Android watch.

# Implementation and Verification

To Be Analysed	Analysis Method
Square vs Circle Screen	Availability and preference
MySQL vs Parse Database	Experimentation and Ease of use
Android Studio vs Eclipse platform	Experimentation and Ease of use
User needs	User preference

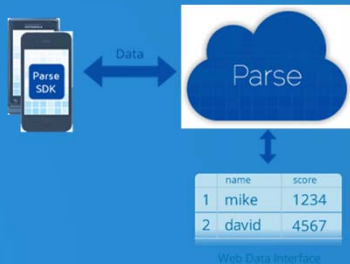
# Square vs Circle Screen

Measure (weight)	Availability	User preference	Total
Square face	10	10	20
Circle screen	10	8	18



# MySQL vs Parse Database

Measure (weight)	Reliability	User preference	Ease of implementation	Total
MySQL	8	8	7	23
Parse	9	10	8	27





# Android Studio vs Eclipse Platform

Measure (weight)	Reliability	User preference	Ease of implementation	Total
Android Studio	9	10	8	27
Eclipse	8	8	6	22



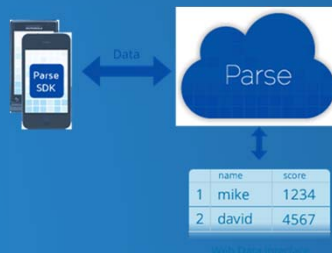
# User Needs

Measure (weight)	User preference	Ease of implementation	Total
Bank balance notification	10	9	19
Fraud alerts	10	8	18
Balance control	9	7	16
Bill Pay	10	8	18

# Final Product Deliverables

## Decision (Based upon our analysis):

1. The square-faced Android Wear Watch is the optimal decision between it and the round-faced watch.
1. The Parse backend would be more efficient than MySQL. Parse offers higher reliability, user preference and ease of implementation.
1. Android Studio will provide the necessary testing facility when implementing the solution.



# Implementation and Evaluation

## December

- Implement communication between Android phone and Watch
- Test communication between devices
- Create Parse Database to mimic customer information
- Test database communication



# Implementation and Evaluation January

- Implement Check balance function
- Test implementation of check balance function
- Connect function to parse database
- Optimize check balance function



# Implementation and Evaluation February

- Implement fraud alert function
- Test implementation of fraud alert function
- Connect fraud alert function to parse database
- Optimize fraud alert function





# Implementation and Evaluation

## March

- Combine all functions
- Test implementation of product
- Optimize product
- Present completed product



## Cost and Resources

Android phone: \$200 - \$800

Android wear watch: \$200

Application : Free





## Conclusion

- Users will be able to quickly and efficiently check the status of their bank accounts
- The features will include fraud protection, balance notifications, and bill pay
- We will allow the user the choice of which alerts he/she would like to receive on the Android Watch.

## Q&A and Demonstration

