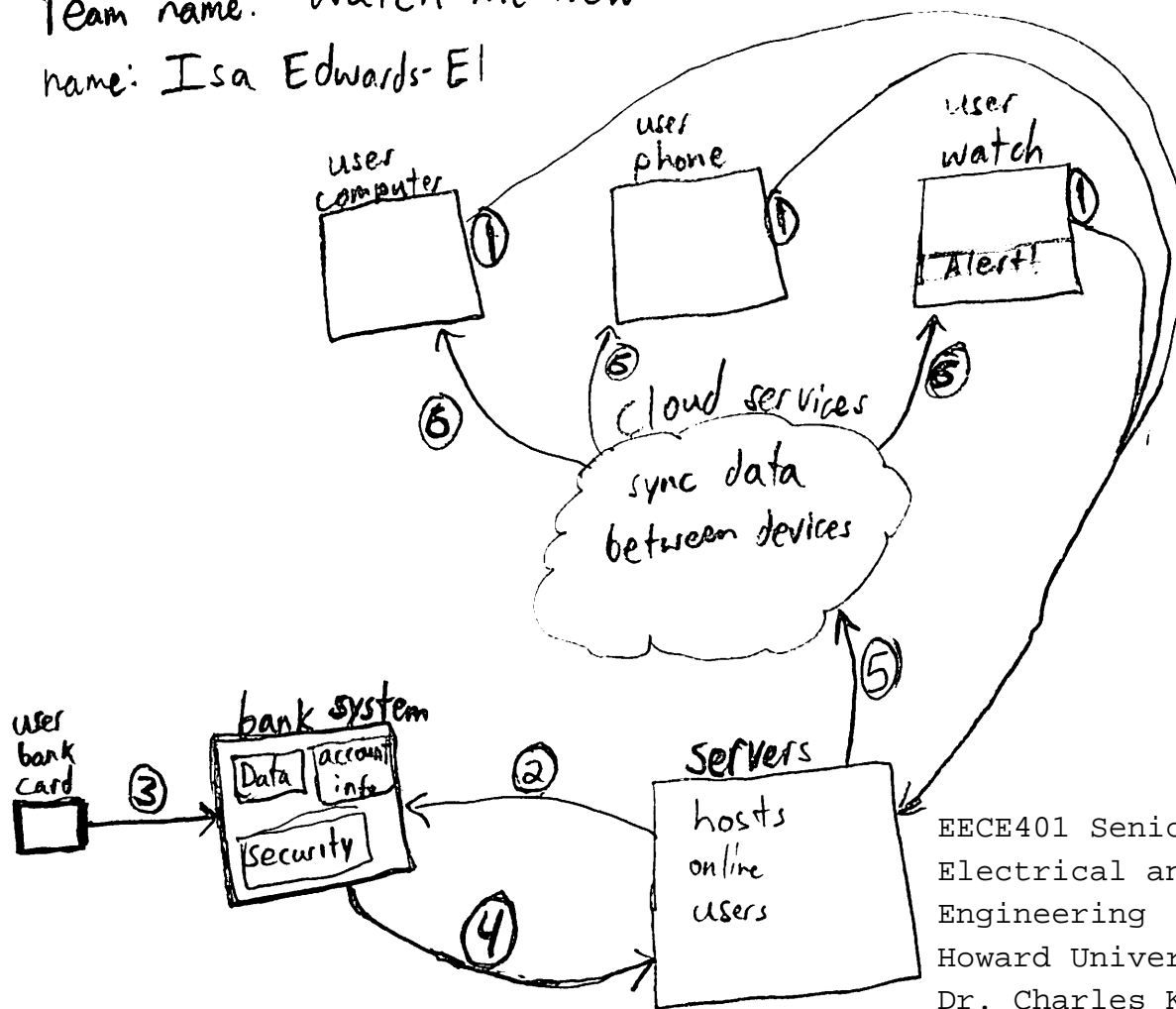


Team name: Watch Me Now
name: Isa Edwards-EI

1. user devices



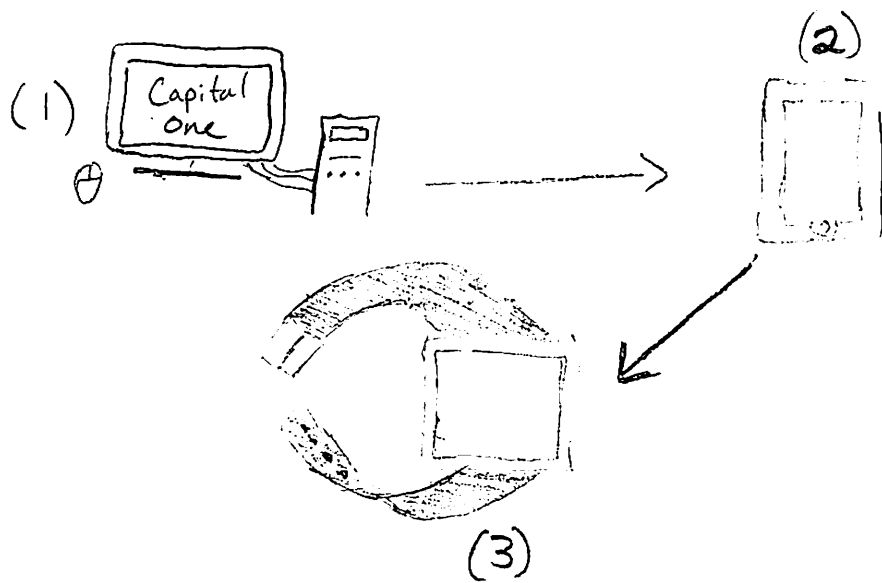
EECE401 Senior Design I
Electrical and Computer
Engineering
Howard University
Dr. Charles Kim -- Instructor
WWW.MWFTR.COM/SD1415.html

- 1) The user signs in to their ^{bank} account on their devices
- 2) The servers host all the online users and accesses their bank accounts for their personal use.
- 3) The activity of the users bank card is tracked
- 4) When suspicious or important (Determined by user) activity happens a message is sent the user.
- 5) Server tracks and send the correct info to the correct user account and saves it on their cloud storage space.
- 6) The cloud storage send the data to all of the users devices that are connected to the app and account but the watch is accessed fastest by the user

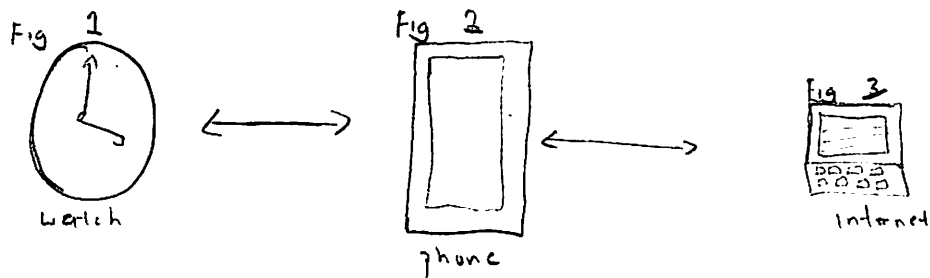
Jordan Monette 10-22-14

The Watchmen

Solution Generation



The electronic information system of Capital One (1) will transmit pre-existing information notifications to the user's cellular device (2). The cellular device will then filter desired/undesired information and prompts depending on the custom settings of desired information + prompts to be sent to the watch chosen by the user. The desired notifications and command prompts will then display on the face of the Android Wear Watch (3). The choices of notifications available for display on the watch will come from Capital One and may include, but not limited to: low balance alert, check balance, deposit alert, fraud alert, bill pay, etc.

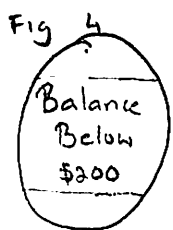


Description

The user will download the app from the app store and decide what features they want to have on their watch. When setup is complete, the users information will be sent to the database (Fig 3) on the internet. We will store that data in a tabular form. Ex: Fig 7

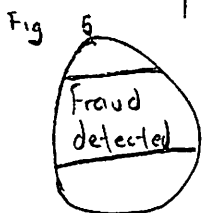
Name	Account #	Balance	Location
John Doe	12345	590.71	D.C

Whenever the user's balance falls below a certain amount, the phone (Fig 2) will be notified and a pop up (4) will appear on the watch (Fig 1)



Low balance notification

Whenever a purchase is made from a location different from the users general location, a similar pop up (6) will appear warning the user of possible fraud

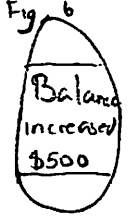


Fraud notification

The user will then have the option to verify the transaction or report it to the bank.

The user should also be notified when a deposit has been made in their account (Fig 6)

Fig 6



Balance increase notification

To program the android watch⁽¹⁾ and phone⁽²⁾, I suggest android studio programming environment. The database⁽³⁾ could be created using parse.

The information in the database⁽³⁾ should be checked as frequently as possible in order to increase security.

The watch⁽¹⁾ will communicate with the phone⁽²⁾ via bluetooth and the phone will communicate with the parse database⁽³⁾ through the users dataplan or WiFi.

Idea Generation

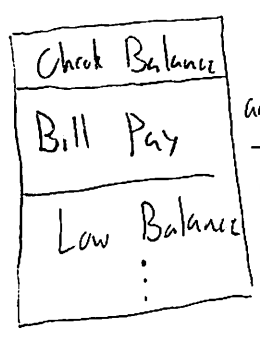
Problem Statement corresponding to design approach: Design a mobile application for Capital One using the Android Wear watch that will enable their customer base to perform desired banking functionality without direct communication with their smartphone.

Constraints

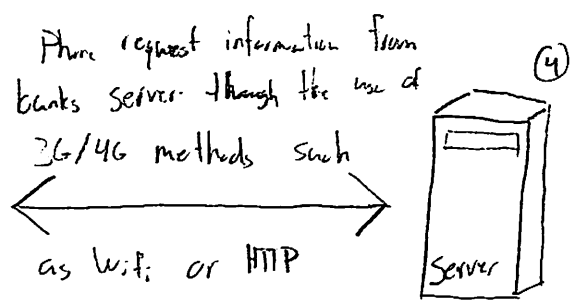
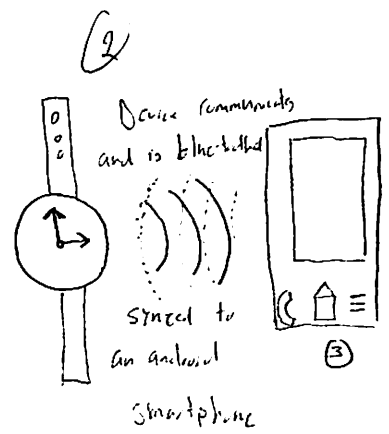
- Information must be readable on watch interface
- Watch has no Wifi capabilities so cannot access banking servers directly

Black Box Overview of Design

List of banking commands ①



List of user actions displayed on Smart Watch



After verification, end-users info is returned to the phone & relevant information appears watch interface. Customer Information (Possible cloud) ⑤

Legend

- 1) List of commands Prompted by Watch
- 2) Android Wear Watch
- 3) Android Smart Phone Compatible w/ Android Wear
- 4) Banking Server (Capital One)
- 5) Cloud Location of end-users information