Progress Report 3

Week of 11/10-11/16

Objectives

1. To discuss strategies and to work on meeting the **11/20 pitch** presentation deadline
2. To regroup and plan out meeting the **12/14 MVP** deadline
3. To prototype working **S3TransferUtilities** Android app that uploads and downloads
4. To **integrate** the AWS Android **SDK** (Rekognition, S3, and core util) into the app
5. To test Rekognition API call in Eclipse and obtain **BoundingBoxs** for objects
6. **To test Rekognition API call in Android app**

Result

- **Successfully integrated** AWS Android **SDK** to app in Android Studio using Gradle
- **Successfully** built, **ran**, tested image upload/download feature in **S3TransferUtil** app
- Read, **learned**, and tested the Rekognition DetectLabels **API** call in Java Eclipse
    - Able to detect labels (objects) in S3 bucket images and to return list of names
    - Found missing components in Eclipse SDK: Instance and Parent objects
    - Missing components made BoundingBoxs un-obtainable
    - Proposed **solution**: 1. Try call directly in Android Std 2. Test again in IntelliJ

Roadblocks

- Missing components in AWS Eclipse plugin causing BoundingBox un-obtainable
- Lack of experience using IntelliJ IDEA
- Lack of experience coding backend in Android Studio
- Market-available vibrating wristband requires more research on how to operate
- Lack of guidance and assistant in Android dev, lack of personnel in general

Proposed Solutions

- For the untested Regonition API call in Android Std problem
  AND the missing AWS Rekognition component problem
  AND the lack of experience using IntelliJ problem
  Directly test Rekognition API call in Android Studio
    - Create new button leading to new activity with text display box
    - New activity auto-calls Rekognition to analyze designated S3 bucket image
    - New activity prints DetectLabelResult object.toString() to text box
    - Developers can check whether Instance and Parent components exist

- For the (Bluetooth + vibrating) wristband integration/PCB build problem

- For the regroup/refocus/recruitment problem

Breakdown of Time Spent

Figure 1 demonstrates the breakdown of Keming's time spent on the 6th Sense Project during week of 11/11 to 11/17, with total of 8 hours.

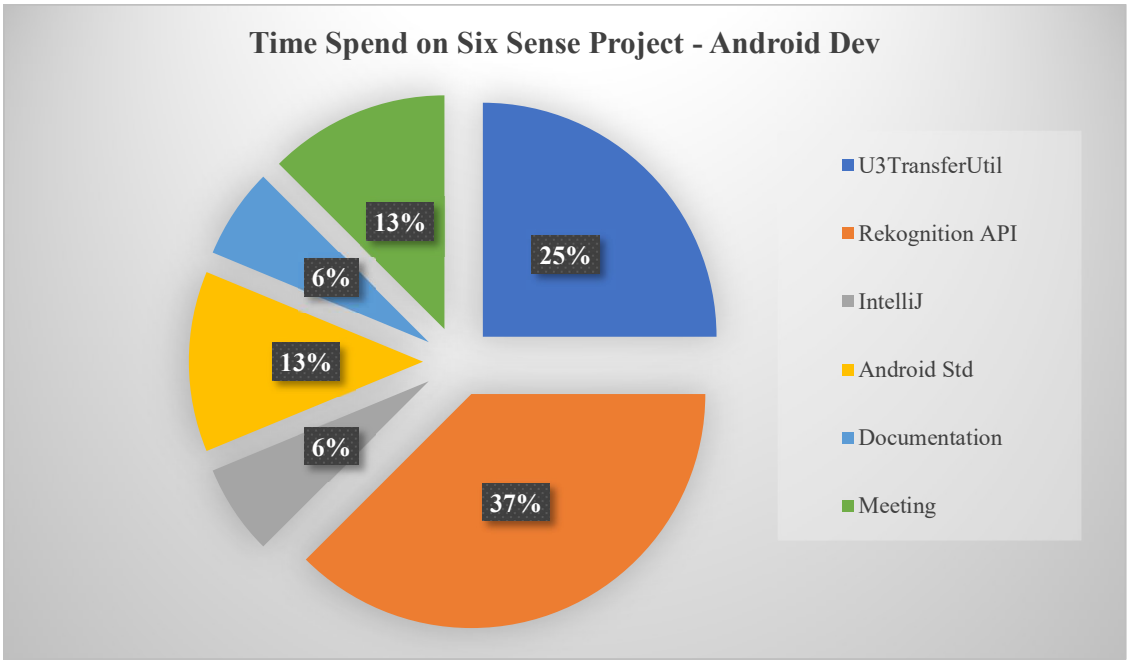

Figure 1 Breakdown of time spend on six sense

Forward

1. Spreadsheet for money
2. Switch Git Repo from public to private
3. Byte 64 encoding image, instead of S3