---------- Project management plan----------

Project 0verview

This application is an all in one PDF convertor. It will support multiple images types and convert them into PDF's and allow for the user to add more than one image to a single PDF. The images will come from the phone's internal gallery, which the user can select. The application will also support emailing the completed PDF file and also save it back to the device, it will support user renaming of the file that is created. The project will be created for Android devices.

Applicable Standards

XML Guidelines

Java

- Document Standard
    - 11 pt font size
    - Heading containing name of project, name of document, class name and semester followed by the document's modification history.
    - team name followed by member names
    - Table of contents at the beginning of the document
    - single spaced
- Artifact Size Metric Standard
    - Size will be determined by the number of requirements our project must fulfill, and the difficulty of programming solutions to those requirements (i.e. the number of APIs/documentation available to solve various problems)
        - Requirement progress
            - What sub functionalities have been met for each requirement
        - Requirements met
        - Tools utilized to help solve each requirement

Project Team Organization

The group consists of David Clay, Nima Mazraeh Farahani, and Daniel Sledd who are all computer science majors. As we are all learning Android programming we will all be contributing to the coding, testing and management process, with some deviation on who has more say on items such as UI and testing. We will meet one or two times a week face to face and have an open chat that we post ideas and questions to if need should arise. While we are all new to Android development and the overall process for working on a big project we all want to take part in each for exposure.

Deliverables

Artifact	**Due Dates**
Meeting Minutes	Tu/Thur 12:00PM - 1:30PM

Individual Logs	9/18, 9/25, 10/2, 10/9, 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 11/27, 12/4, 12/11
Group Project Management Reports	10/16, 11/6, 11/20, 12/4
ConOps	9/17
Project Plan	9/17
SRS	10/8
High-Level Design	10/8
Detailed Design	10/29
Test Plan	10/29
User's Manual	12/3
Final Test Results	12/3
Source, Executable, Build Instructions	12/3
Project Legacy	12/3

Software Life Cycle Process

Our group will use an Agile approach to the life cycle process as we will be having weekly meetings or scrums it is assumed that during the week each member is working on the project and focusing on getting each part correct. While we do not have time to keep back tracking with time constraints this method is best suited for us.

Tools and Computing Environment

The program will be written for Android

Windows OS Mac OS

Android SDK Android Studio

Git Desktop Java

XML

Configuration Management

We will use git for version control in conjunction with github to host our repositories. We will have a master branch containing the latest stable release. Our group will lean towards pair/cooperative programming so we will be working from a single branch merging to master when appropriate. However, we may utilize deploying separate branches to explore/elaborate on different ideas. Once we settle on a paradigm, we will merge the branches into our working branch and work from there.

Quality Assurance

During our weekly meetings QA will happen and be addressed. It is the responsibility of everyone to attend these meetings even if we have to do them over messengers. Parts of the code will be brought in by the deadlines where some testing and code review will be performed.

Risk Management

Image collection time:

We will try different approaches for obtaining images from the phone as well as testing the effectiveness of our user interface in grabbing multiple images. We will set the gallery as the default directory, possibly expanding image collection to other directories on the phone as well as possibly tying our app with the built in camera for dynamic image collection.

Formatting errors:

We will start off with simple formatting options and build up from there. Before adding new formatting features, testing will be performed to ensure quality in the ways this is handled in our conversion process. We will test images of different sizes, resolutions, and formats.

Image quality:

We can avoid utilizing our own image compression when importing images into PDFs and also we would support a wide array of image formats that utilize less lossy/lossless compression implementations.

Email interface integration:

This can be mitigated by planning out the graphical user interface and how each of the events we perform through the application will affect said interface. This will ensure that the interface will remain intuitive for the end user and that it will be seamless and responsive as possible.

Table of Work Packages, Time Estimates, and Assignments

Android Application (David, Daniel and Nima)

This package all members of the group will contribute to complete.

1. Design on converting various types of images to PDF files. Due 10/1
2. Design method of working with the gallery on the Android device. Due 10/08
3. Design method for interacting with e-mail to be able to send PDF. Due 10/08
4. Deliverable Software Requirements Specification and Test Plan. Due 10/15
5. Design method for adding multiple images to one file. Due 10/20
6. Design method for naming file and storing. Due 10/20

Interface Design (David, Daniel and Nima)

1. Drop down menu’s for users. Due 10/22
2. Additional Interface Design, Splash page. Due 10/29
3. Deliverable High level design and Detailed Design. Due 10/29

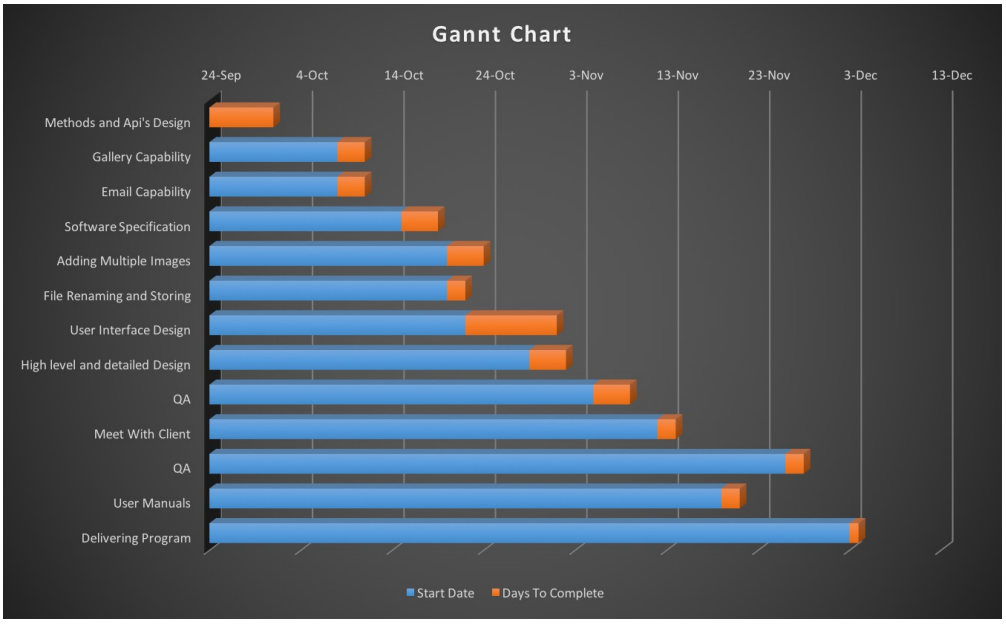
Testing of App

1. Initial Testing to check the application can send E-mail and quality of Images. Due 11/5
2. Check with Client to make sure requirements are meet to their standards. Due 11/12
3. Addition hurdles or Testing can be used here, fixing bugs in requirements and retest to assure client’s requirements have been met. Due 11/26

Finalizing the App.

1. User manuals and final documentation drafts. Due 11/19
2. After final bug fixes and client feedback, User manual and final documentation. Due 12/3 on Deliverable Date.

PERT Chart



Technical Progress Metrics

We will track the requirements phase via Changing of requirements and the number of requirements met.
Our analysis and design phase will be tracked by completed UML diagrams.
Implementation will be tracked by the number and name of the classes and methods added.

For technical metrics, we will document:

- Memory use for various image formats and resolutions
- Speed of image conversion
- User interface ease of use

Plan for tracking, control, and reporting of progress

Each team member will post the following information weekly: individual time and activity log, individual status information, individual issues and problems, and individual defect log.
At minimum, there is one time meeting which each member share the individual progress that has been done during the week passed.
Overall Status of the whole project will be discussed and determined in each meeting and any necessary changes to due dates will be executed and recorded.
PERT or Gannt chart should be updated accordingly.