Logo, company name

Description automatically generated

Project PicMe

Justin Storms, Andrian Stepanyuk, Wyatt Stohr

# Introduction

## Goals and motivation

TeamNamePending has come to the consensus that we wanted to develop an application which has the potential to be an asset on a resume while venturing into territory just foreign enough to allow ourselves to gain new skills as prospective software engineers. Up until this point, a majority of what we have done has been simply programming minor tasks for a classroom, but not actually making something with application in the real world from that experience. That’s why we decided to develop PicMe.

# Proposal

We propose that our team develop PicMe, a social media application designed to connect users via the uploads they make as they experience their day to day lives. We intend to engineer a console version of this application to demonstrate its functionality in a directory first and foremost, while leaving the connections open to be hooked up to a cloud-based database server in future development post-class if doing so within the original scope of the project is reaching too far.

## What’s Included

Specifics of PicMe include:

* Login and Password management
  + Cryptography-focused due to the sensitive nature of the information held.
  + Non-local storage of credentials so logins can occur anywhere the app is installed.
* Database Management
  + Upload capabilities for storing data in a centralized, local network.
  + Framework to include cloud-based database management (pending success in localized database development).
  + Back-end interface to troubleshoot and interact with the database directly without the requirement for the user to know SQL.
    - Allow for removal of data by administrators.
    - Set backups to prevent failure points.
    - Will not allow administrators to change the structure of the data in the database, that is reserved for development. Documentation system will be provided alongside these privileges.
* User feed and interface
  + User will be able to upload and manage their photos and posts, while being able to link to friends and associates.
    - User feed will pull in the posts of connections made based on a review system.
  + Securities to allow user to approve or deny requests to connect.
  + Securities to prevent unwanted or illegal interactions (profile restrictions, age-related, etc.)
  + Profile To allow the user to express themselves with as much or as little information as they wish (however, this may impact their visibility due to security features).

## Design Layout

Provided is an example of the rough UI for the commercial end user. Implementation will include an image-based layering method to establish window design. Windows and images are going to follow a .SVG or similar vector-based format to allow for easy conversion between multiple platforms (such as windows PCs and smartphones) which have different resolution requirements.  
Database management will follow a less aesthetic “function over form” interface akin to normal Java GUI such as JFrame or JPanel.

