

## **Mitchbot Wx: Outerwear Suggesting Daily Weather Email with Settings Website**

Progress Report  
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CPET499 – Web Systems

### **Project Summary**

- This project consists of an email service that sends an email containing the weather conditions and recommended outerwear at scheduled times.
- Users will have the ability to sign up and login to edit their parameters via a web site.

## Overview

- Main Components
  - Web site with login, registration, and log out.
    - Change user settings
    - Manage account
  - Email service
    - Automatically send emails to subscribed users
      - Include specified user parameters

## Project scope

- Activities
  - Design website
  - Build website
  - Code business logic
  - Design and build database
- Testing
  - Register, login, log out
  - Email alert logic and scheduling
  - Weather API

## Problems and Corrections

- Scope change
  - Email scheduling
    - This still requires investigation. The original idea was to schedule the email service based on user's parameters using Cron on a Linux server.
    - May end up having to limit the times that users can select to hourly, rather than selecting any time.

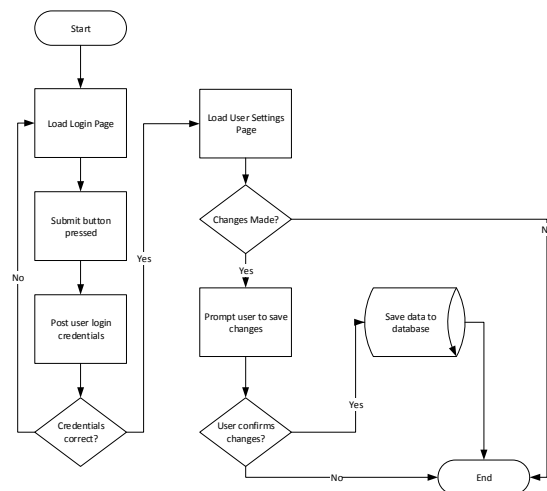
## Problems and Corrections

- Encountered problems and corrections
  - I want to ensure that users can feel safe registering their credentials with my site, so I did the research and work necessary to enable HTTPS over TLS.
    - This took longer than anticipated, but it was a good learning experience.
    - Now I have a basic site to build upon that has encrypted communications.

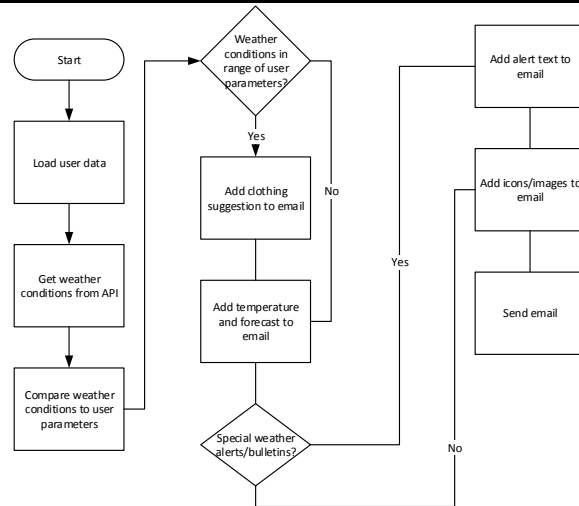
## Project Milestones and Deliverables

- Prototype
  - Working email subscription service with settings website.
- Final Report
- Final Project Presentation

## Web System Design – User Login/Settings



## Web System Design – Email Service



## System Requirements

- User Interface and Data Presentation Layer
  - Web site
    - Login page
    - User settings page
    - Using Bootstrap HTML/CSS/JS framework
- Server System Requirements
  - Digital Ocean Hosting Provider
  - Ubuntu 14.04 Linux Server
    - 512MB
    - 1 CPU
    - 20GB SSD Disk

## System Requirements

- Business/Process Logic
  - Apache Web Server
  - PHP
  - Python
- Data Storage
  - MySQL Database
  - JSON files as necessary

## Major components of the Proposed System

- Hardware
  - Virtual hosted Linux Server
  - Windows and Linux development computers
- Software
  - Text Editors
  - Database Management GUI
  - File Transfer Utilities

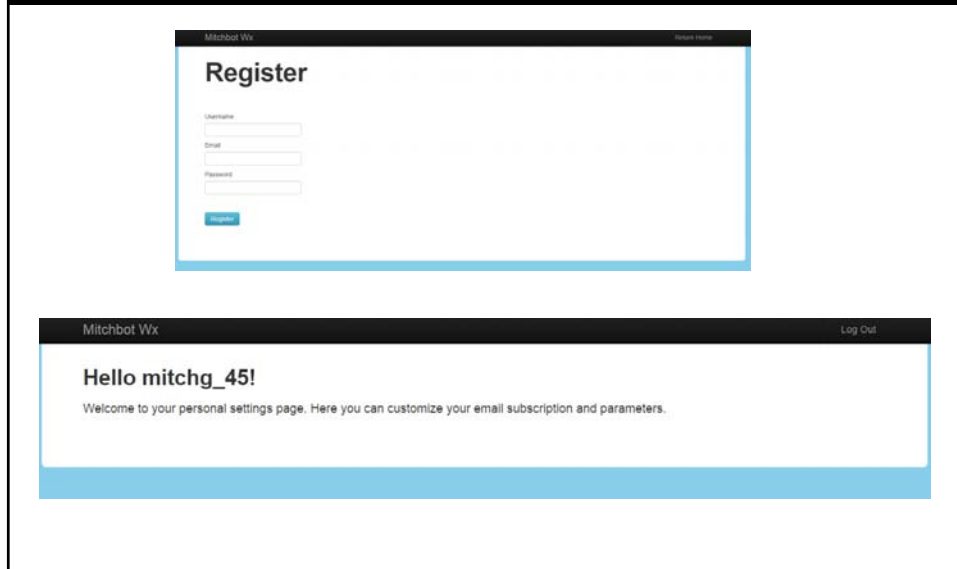
## Software Programming Tools

- Text Editors
  - Vim
  - Sublime Text 3
- MySQL Workbench
- FileZilla FTP Client

## User Interface

The screenshot displays the Mitchbot Wx web application. At the top, a dark navigation bar contains the text 'Mitchbot Wx' on the left and 'Register' and 'Log In' on the right. Below this, a white box with a blue border contains the heading 'Mitchbot Wx' and two lines of text: 'Register to receive personalized emails containing the current weather conditions and outwear suggestions based on your settings.' and 'Receive the weather conditions in your inbox on your schedule!'. To the right of this box, a white login/register form is visible. It has a dark header with 'Register' and 'Log In' links. The form contains two input fields labeled 'Username:' and 'Password:', and a blue 'Login' button at the bottom. The background of the page is light blue.

## User Interface



## Schedule

- Complete user interface
  - 1 hour
  - 11/5/2015
- Set up user settings database table(s)
  - 5 hours
  - 11/12/2015
- Client side Javascript coding
  - 2 hours
  - 11/17/2015



## Schedule

- Code email service
  - 5 hours
  - 11/24/2015
- Test Functionality
  - 3 hours
  - 11/30/2015