1. Overview
   1. Project Summary

The motivation for this project includes the need for the population to consume coffee and the manual and physical proximity demand of setting up a coffee machine to make coffee which can be simplified and automated, along with the business potential of the project.

The purpose of this SPMP is to define and outline our management and organization plans for the development of our coffee automation project. This is to ensure a successful plan of action and to implement solutions to potential upcoming problems.

The team will observe the guidelines and plan of action developed within the SPMP and modify documentation and resources to adjust and evolve to fit the needs of the project.

* 1. Purpose, Scope, and Objectives

The objective of the project is to streamline and automate the morning in-house coffee machine coffee-making process. The final product will accomplish this by using the combination of a mobile/web application, a server with a database, and a modified coffee machine working in conjunction to schedule and automate the production of coffee. The mobile/web application will serve as a user interface in order to facilitate the desired automation and scheduling settings. The server and database will store and fetch the necessary information for operation. The coffee machine, modified by adding a Raspberry Pi-based embedded system, will serve the coffee as determined by the information fetched from the server.

The project will be evaluated for potential business application, and the cost of production will be analyzed and compared to the potential market value of such a device. If the product is viable, then the project would be altered to fit a successful marketing and business plan.

* 1. Assumptions and Constraints
* All necessary funding will be available for the life of the project
* All required resources identified during the project will be obtained and dedicated for the project until no longer required
* Interfaces to other external systems will not be considered and will focus on making the project successful
* All necessary hardware and software will be sourced from available and known academic sources
* The turnaround time for compiling/testing prototypes and project versions will be near immediate in order to debug and test
* The Raspberry Pi’s and Computer hardware will be reliable or replaced if found defective
  1. Project Deliverables
* Source Code
* Documentation (Word Format & .docx file name extension)
  + Project Proposal (9/30)
  + Software Requirement Specification (10/13)
  + Software Project Management Plan (11/13)
  + Software Analysis Specification (11/18)
  + Software Design Document (12/2)
  1. Schedule and Budget Summary
  2. Evolution of the Plan

The SPMP will be version-controlled with standard version numbering (Initial version 1.0, Revision 1.1, etc). As of version 1.0, the SPMP will be revised weekly depending on the team’s decision and on whether there are significant, important changes needed to be made and understood and planned out. If there are alterations to the scheduled portions of the SPMP, the team will gather to determine whether a complete restructuring of the schedules is necessary (i.e. to push back the latter items in a Gantt chart or otherwise). Unscheduled modifications will be implemented passively and weekly with the document.