# ECE 495/595: Web Architecture and Cloud Computing Academic Program Review (APR) Project Management Plan

**Team Members:**
Alan Seciwa (aseciwa@unm.edu)
Vamshi Krishna (vamshins@unm.edu)
Magesh Rajasekaran (mrajasekaran@unm.edu)
Sriranjitha Sankar (ranjitha@unm.edu)
Sushma Singhi Reddy (sushmareddy@unm.edu)
Feng Shen (shenfeng@unm.edu)
Shiquian Shen (shens@unm.edu)

**Sponsor:**
Nancy Middlebrook, ndm@unm.edu

| | |
|---|---|
| Creation Date | : 11/08/15 |
| Last Revised | : 11/10/15 |
| Version | : 0.3 |

## Introduction:

The web application for the Academic Program Review (APR) Office within UNM Institutional Effectiveness involves updating an existing template for creating APR self-studies, and integrating with other web forms. The creation of the Action Plan is a tracking web form with a database backend. The current Action Plan and Yearly Reporting Excel Template are located at: http://apr.unm.edu/templates.html. It is the first item under "Templates". Creation of a Program Evaluators worksheet (web form with database backend) – the current template Review Team Worksheet is a Word Document and is also located at: http://apr.unm.edu/templates.html. It is the fourth item under "Templates."

## Project Scope:

The scope of project include the planning, design, development, testing, and transition of the APR website. This website will meet or exceed organizational website standards and additional requirements established in the project charter. The scope of this project also include completion of all documentation, manuals, and training aids to be used in conjunction with the website.

## Initial project plan:

This document will provide information of the project, including the project's milestones, team member responsibilities and their roles, Technology stack used for the project development, Repos for the project.

## Milestones List:

The below chart lists the major milestones for the APR website. This chart is comprised of only of major project milestones such as completion of a project phases or gate review. There may be smaller milestones, which are not included on this chart but are included in the project schedule. If there are any scheduling delays, which may impact a milestone or delivery date, the project manager team must be notified immediately so proactive measures may be taken to mitigate slips in dates. Any approved changes to these milestones or date will be communicated to the project team by the project manager team.

| Milestone | Description | Date |
|---|---|---|
| 0. Supporting documents | Initial requirements documents and Gantt chart | Nov. 12, 2015 |
| 1. Initial prototype | Initial functioning app with little functionality, or detailed data model, with an initial backend database | Nov. 17, 2015 |
| 2. Prototype 2 | Sophisticated prototype | Nov. 24, 2015 |
| 3. Prototype 3 | Further developed prototype | Dec. 1, 2015 |
| 4. Final Prototype | Final working prototype | Dec. 8-10, 2015 |

# Communication Management Plan:

This communication Management Plan set the communication framework for this project. It will server as a guide for communication throughout the life of the project and will be updated as communication requirements change. This plan identifies and defines the roles of APR project team members as they pertain to communications. Is also includes a communications matrix which maps the communication requirements of this project, and communication conducted for meetings and other forms of communication.

The project management team will take the lead role in ensuring effective communication on this project. The communications requirements are documented in the Communications Matrix below. The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it, and to whom to communicate.

| Communication Type | Description | Frequency | Format | Participants/Distribution | Deliverable | Owner |
|---|---|---|---|---|---|---|
| Weekly Status Report | Email summary of project status | Weekly | Email | Project Sponsor, Project Team | Status Report | Project Manager Team |
| Weekly Project Team Meeting | Meeting to review action register and status | Weekly on Wednesdays @ 3:30 pm | In person | Project Team | Update Action Register | Project Manager Team |
| Project Gate Review | Present closeout of project phases and kickoff next phase (sprint) | As needed | In person | Project Sponsor, Project Team | Phase completion report and phase kickoff | Project Manager Team |
| Technical Design Review | Review of any technical designs or work associated with the project | As needed | In person | Project Team | Technical Design Package | Project Manager Team |

## Communications Conduct:

**Meetings:**
The Project Manager Team will distribute a meeting agenda at least 1 day prior to any scheduled meeting and all participants are expected to review the agenda prior to the meeting. During all project meetings the timekeeper will ensure that the group adheres to the times stated in the agenda and the recorder will take all notes for distribution to the team upon completion of the meeting.  It is imperative that all participants arrive to each meeting on time.

**Email:**
All email pertaining to the APR Project should be professional, free of errors, and provide brief communication.  Email should be distributed to the correct project participants in accordance with the communication matrix above based on its content. If the email is to bring an issue forward then it should discuss what the issue is, provide a brief background on the issue, and provide a recommendation to correct the issue.  The Project Manager Team should be included on any email pertaining to the APR Project.

**Informal Communications:**
While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussion between team members must be communicated to the Project Manager Team so the appropriate action may be taken.

**Formal Communications:**
Formal communication may be required during a project to confer contractual decisions, such as changing the scope of work or schedule.  These changes require more formality than e-mail or in person conversation; they often require formal, traceable documentation such as registered letter.

# Technology stack:

This project follows MVC architecture. Following are the technologies that are going to be used for this project:

**Front-end:**
- HTML
- CSS
- JavaScript, JQuery

**Ruby-Rails:**
- Ruby 2.2.2
- Rails 4.2.4
- Mandrill (Email functionality)
- CAS

**Back-end/Database:**
- SQLite (or) PostgreSQL

**Version Control:**
- Github

These technologies are not final and may subject to change based on the project requirements during the development process.

# Anticipated team member roles:

There are total 7 members in the team. We have shared the roles based on our technical background.

**Alan Seciwa**

He works on the Database design, front end development and styling. He shares responsibility of Project management with Vamshi.

**Vamshi Krishna**

He works on the Database design, Rails development tasks. Rails development includes developing Models, Controllers, Migrations and Email functionality. He speaks with sponsor on the status of the project, gathering requirements, clarifying issues/concerns, etc. He shares the responsibilities of Project management with Alan.

**Magesh Rajasekaran**

He works on the Database design, styling and also takes part in Rails development with Vamshi Krishna.

**Sriranjitha Sankar**

She works on designing the front end of the application and she works with the other team members Vamshi Krishna and Magesh Rajasekaran in the Rails Development.

**Sushma Singhi Reddy**
She works on designing the front end of the web application and coordinates with other team members implementing it.

**Shiqian Shen**
She works on front end of the web application, database design and styling.

**Feng Shen**
He works on the front end of the web application and part of database designs.

# Project repositories:

Our project documents, code, etc. is pushed into the online Github repository https://github.com/vamshins/apr-actionplan. Each team member forks this repository and pushes the developed code/documents to their forked repos. If they want to merge their forked repo to the main repo, they create a pull request. After a thorough review, changes are merged to the main repo. "Documents" folder is created to store the documents from both Sponsor and team members.

## Requirements:
Following are the requirements that we got from Sponsor initially.
- Login/Security access to web forms using CAS.
- Front-end web page that has instructions, information, links to information for filling out the web form.
- Forms that allows for data entry and/or uploading a file (Should have the ability to save PDF or excel files to a repo on server, this would count as "additional supporting documents"). Submit the completed form to the appropriate office.
- Ability to print or download individual documents submitted by each unit or program.
- Ability for individual programs/units (for the Action Plan form) or Program Reviewers (for the Program Evaluators worksheet) to edit submissions and resubmit.
- Have a snapshot of the previous version because the customers will have to update the forms yearly. Have the file be printable.
- The data is locked after the user submits the Action Plan. The user cannot edit the form anymore once submitted. If the user wants to edit some information in the site, administrator of the site has to release the form for the user. Give the administrator the ability to release form once they are submitted. Often user will have to make correction to the submitted form.
- Ability to pull the data collected from all submissions from the backend database for reporting purposes.
- Send email to admins once an application is complete (action plan web form).
- Send emails in the previous requirement.

### Code Repository URL:
https://github.com/vamshins/apr-actionplan. Information regarding setup, build and running of the project is included in README.md file. It also contains information that includes tracking status of the milestones, To-Do tasks, etc.

# Design Document:

### Purpose of the website:
The purpose of the APR website is to provided faculty and staff the ability to fill-out forms from a web interface such as the Action Plan, Program Evaluators worksheet and as well as upload supporting documents.

### Intended Audience:
The target audience of this website are the internal stakeholders and several external stakeholders that have to fill out the forms.

### Outline:
Main Page
- Similar web design to the apr.unm.edu webpage.
- Instructions, information, and links on how to fill out the forms

Action Plan and Yearly Update Page
- Tile Page
- Instructions (Once instructions are understood, a start button will be displayed at the bottom to start the form).
- Drop down-like format for filling out the form. Each drop down will encompass the following criterion:
  - Program Goals
  - Teaching and Learning: Curriculum
  - Teaching and Learning: Continuous Improvement
  - Students
  - Faculty
  - Resources and Planning
  - Facilities
  - Program Comparisons
  - Future Directions

Academic Program Review Team Worksheet Page
- Instructions
- Drop down-like format as the one listed above to keep it consistent.

# Project Management Tools:
- Microsoft Project 2013
- Doodle for scheduling the meetings