Project Plan:

AE Project Management Tool

Group 2: Team JSON Bourne

Date: January 18, 2020
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Document Information

Revision History

Version	Date	Status	Prepared By	Comments
1.0.0	01/22/2020	Completed	JSON Bourne	N/A

Document Control

Role	Name	Email	Telephone
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Scope

To implement a resource utilization optimization system that allows for the following users to be able to perform the tasks respective to their roles:

1. Individual Contributors:
    a. Able to create a profile in the system with specific input fields that will be defined in the Project Requirements Document (PRD)
    b. Able to edit information in their *own* profile if one has already been created
2. Project Managers
    a. Able to create new projects, with specific input fields that will be defined in the PRD.
    b. Able to assign workload to individuals on projects on a monthly basis
    c. (Stretch Goal): Able to review and approve or reject an individual's attempt at creating/editing their profile before said individual contributor's profile is successfully completed/their information is added to or updated in the database
3. Resource Managers
    a. Able to easily view information on individual contributor's availability.
        i. Underutilization/Overutilization
    b. Able to look up which staff/individuals have appropriate skills and appropriate availability level for a potential project
        i. (Stretch Goal): output displays in priority order either by
            1. Degree of how many skills an individual has matches the criteria
            2. Individual's level of availability
4. Admin
    a. Able to adjust the tables of the system's database through setting adjustments:
        i. Able to add/remove/edit Disciplines
        ii. Able to add/remove/edit Skills
5. All Users:
    a. Able to sign in using their Azure Active Directory Accounts

Change Management Plan

Refer to Appendix Section 1.

Schedule Management and Work Breakdown Structure

Schedule Management (Gantt Chart)
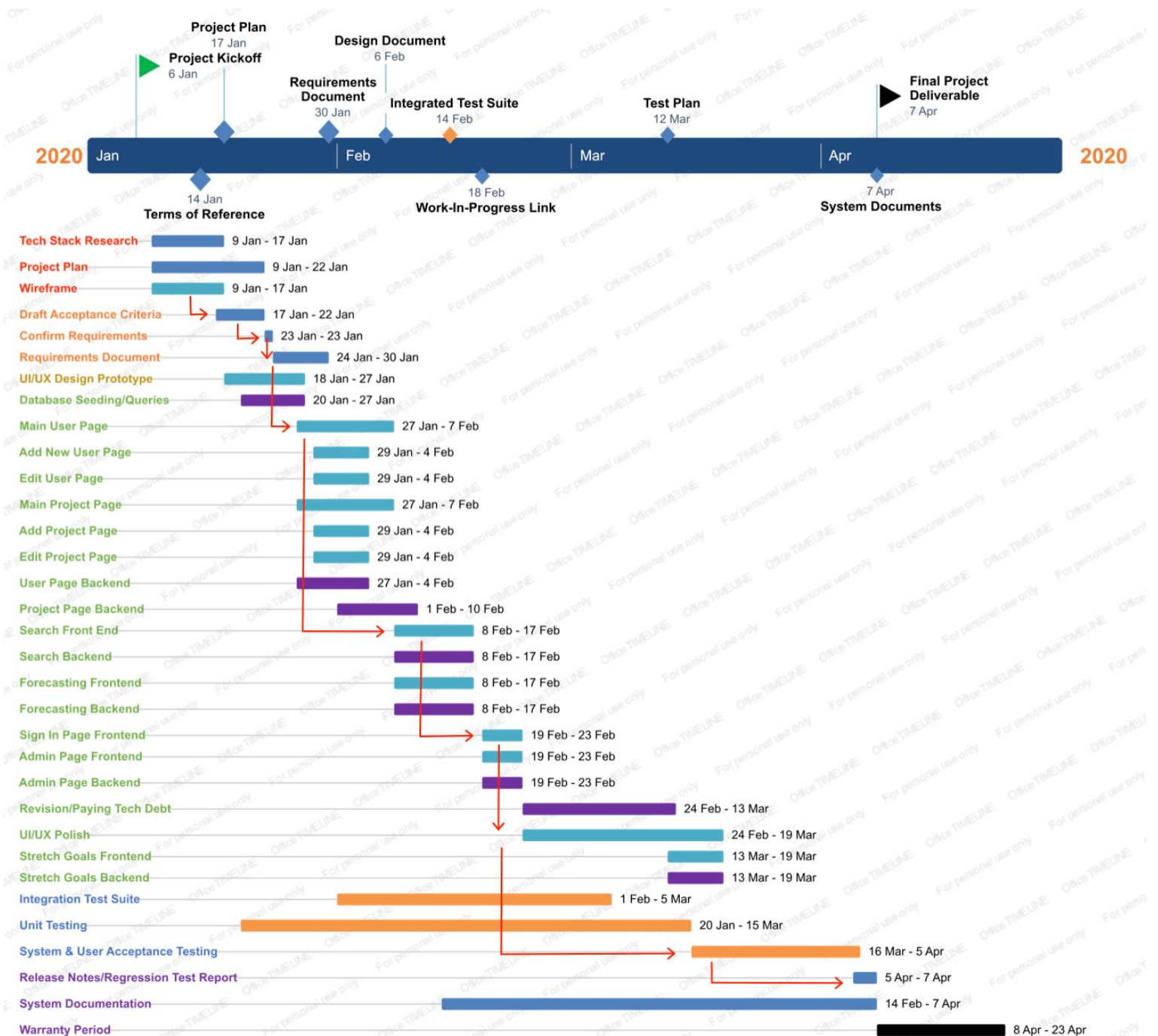
Legends

SDLC	Initiation/Formation	Requirements	Design	Coding/Building	Testing	Release Management

Teams		Frontend		Backend		Testing		Documentation

Critical Path Justification:

Our critical path begins at wireframing as that will give us the vision of what our project will entail. This will allow us to draft the acceptance criteria, which we will get confirmation on before finalizing our requirements document. Our requirements document will allow us to get started on the user page, which has modules that the search front page is dependent on. Once this is completed, we can focus our efforts on testing (we will be continuously testing while coding however it will be our focus during this time in the critical path). Finally, we will complete our system documentation.

Work Breakdown Structure

Legend:

Subteams:	Frontend	Backend	Fullstack	Database	Project Manager

SDLC stage	Task	Assignee	Assignee #2	Estimated Cost
Initiation/ Formation	1. Tech Stack Research	Chi		$0
	2. Project Plan	Jacqueline	Team JSON	$0
	3. Wireframe	Kaye		$0
Requirements	1. Acceptance Criteria/Definition of done	Jacqueline		$0
	2. Confirmation of requirements with stakeholders	Jacqueline	Team JSON	$0
	3. Requirements Document	Jacqueline	Team JSON	$0
Design	2. UI/UX design prototype	Kaye		$0
Coding/Building	1. Database Seeding/Queries	Nicole	Jacqueline	$0
	2. User Frontend: - Main User Page - Add New User Page - Edit User Page	Kaye	Stacy	$0
	3. Project Frontend - Main Project Page - Add Project Page - Edit Project Page	Lisa	Stacy	$0
	4. User & Project Backend	Jenessa	Chi	$0
	5. ~~Sign In Logic & Frontend~~ - Azure active directory API integration/sign in	~~Kaye~~		$0
	6. Admin Page Frontend	Kaye		$0
	7. Admin Page Backend	Stacy	Chi	$0
	8. Search Frontend	Lisa		$0
	9. Search Backend	Chi	Stacy	$0

	10. Forecasting Frontend	Lisa		$0
	11. Forecasting Backend	Nicole	Chi	$0
Testing	1. Unit Testing	Team JSON		$0
	2. Integration Test Suite	Chi		$0
	3. System/User Acceptance test	Jacqueline		$0
Release Management	1. System Documentation	Jacqueline		$0
	2. Release Notes / Regression Test Report	Jacqueline		$0

Budget Management

The project budget is estimated to have a zero cost. All project team members will be utilizing the free community version of Visual Studio. Furthermore, Associated Engineering will provide access to the Azure Active Directory and database.

Risk Management Plan

This project has the identified risks as summarized in the table below. We have outlined three risks with a medium probability of occurring and two risks with low probability of occurring.

Risk ID	Risk Description	Assessment	Mitigation
1	Unrealistic project component completion timelines	medium	Incremental development, weekly timeline check-ins to stay on track and divert resources as needed
2	Discrepancy between created product and desired product	medium	Sponsors review wire-frames and prototypes. Identify and clarify assumptions that are made
3	Possible corruption of database during development	medium	Keep uncorrupted version of database to reset if needed
4	Private contractor information could be leaked through the system during development	low	Provide testing environment that only contains mock data
5	Database attacks -SQL injection attacks via product	low	Sanitizing user inputs, following best practices for security, include in testing plan

Communications Plan

Communication	Frequency	Goal		Owner
Project Team				
Project status report	Weekly	Review project status and discuss potential issues or delays		Project Manager

Team Stand-up	Daily	Discuss what each team member did yesterday, what they'll do today, and any blockers	Project Manager
Task progress updates	Daily	Share daily progress made on project tasks	Project Manager
Project review	At milestones	Present project deliverables, gather feedback, and discuss next steps	Project Manager
Post-mortem meeting	At end of project	Assess what worked and what did not work and discuss actionable takeaways	Project Manager
Project Sponsor (via AE proxy, Dave)			
Project status report	Weekly	Review project status and discuss potential issues or delays	Project Manager
Project review	At milestones	Present project deliverables, gather feedback and discuss next steps	Project Manager

Possible areas of conflict:

· Disagreements about implementation

- o Majority consensus; if not, consult sponsors

· Specialized team disagreements

- o Specialized team meeting to discuss areas of conflict
- o Discussion with Project Manager
- o Project team discussions resulting in possible rearrangement of specialized teams
- o Further escalation requires consultation with our project TA Dave and then Jerry Jim
  - ● This is an unlikely course of action because we are confident in our collective ability to resolve interpersonal conflict

Change Management Plan

Refer to Appendix Section 2.

Appendix

Section 1: Milestones and Major Deliverables

Milestone/Deliverables	Dates of Delivery	Comments
1. Terms of Reference	January 14, 2020	Completed (but will have ongoing updates)
2. Project Plan	January 17, 2020	In Progress
3. Requirements Document	January 30, 2020	N/A
4. Design Document	February 6, 2020	N/A
5. Integrated Test Suite	February 14, 2020	N/A
6. Work-In-Progress Link	February 18, 2020	N/A
7. Test Plan	March 12, 2020	N/A
8. System & User Acceptance Testing	April 3 - 5, 2020	N/A
9. System Documents	April 7, 2020	N/A
10. Final Project Deliverable	April 7, 2020	N/A
11. Warranty Period	April 8 - 23, 2020	N/A

Section 2: Change Management Plan

The following items will be subject to change management.

Project Constraints:

- Deadline is April 7, 2020, with a warranty period which extends until April 23, 2020.
    - April 23, 2020 is a hard deadline, with little possibility of further extension
    - Scope is firm for completion of basic framework components, otherwise constrained by time.
    - Quality is important, but will be constrained by time constraints

Change Management Guidelines and Purview:

- <u>Primary Deliverables:</u>
    - Framework Components

- <u>Secondary Deliverables:</u>
    - Scope

- The team has room to interpret requirements in the following areas:
    - Specific Framework content
    - Task Assignments
    - Quality Review Specifics

Estimate of Change volume:

> We assume the number of change requests will be roughly 5. We estimate change evaluation and management to require 10-15 hours.

Roles and Responsibilities

The project manager will serve as **change manager** and **lead change evaluator**. Responsibilities include:

- Receive and log change requests
- Perform timely and adequate evaluation of changes in terms of their impacts on project deliverables and constraints
- Outline options and recommend courses of action and priorities for changes
- Track and facilitate timely decisions on changes
- Incorporate changes into the appropriate project documents
- Communicate changes to the project team and others as the communication plan above dictates

The **change requestor**, who is any stakeholder [i.e. AE, the project supervisor (Dave), or the project team], may submit project change requests following the submittal process indicated below.

The Change Management Process

1. Submittal of Change Requests:
    a. If the stakeholder submitting the request is AE, they will communicate the request to the project supervisor, who will then relay the request to the project team.
    b. If the change requestor is the project supervisor, he will communicate the request to the project team through either an in-person meeting during the weekly meetings, through an email to the project contact (the project manager), or through the team's slack channel.
    c. If the change requestor is a member of the project team, the request will be logged into a ticket posted in click-up and placed into a backlog. They will notify the project manager if the request involves a realized risk or issue.
    d. The change manager will monitor the risks and issues for likely changes every two days.
2. Evaluation:
    a. The lead change evaluator will consult the team and/or the project supervisor and evaluate all change requests.
3. Decision:
    a. Unless otherwise noted, changes will be approved, rejected, or shelved within 7 days of submission to the change decision maker. The decision maker may also request further evaluation.
4. Integration:
    a. The change manager will update project documentation for significant changes only. A running summary of changes will be posted to the project change log within the project team's Google Drive folder
5. Communication:
    a. The project team and the project supervisor will be notified of changes as they are approved at the next project team meeting.
    b. AE will be notified of changes in the next meeting with the Sponsor.