Project Management Plan

ARGO UX Master Component Library

ABSTRACT

The purpose of this plan is to provide a general timeline and present the fact that the team has understood the project and its expectations. The plan attempts to minimize risks, showcase chosen methodologies, organize deliverables, and inform all stakeholders of the project layout. This plan is subject to change as the project progresses and risks evolve throughout the lifecycle. Any changes made will be validated by at least 2 team members and a representative from ARGO.

Contributors

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Has every member of your group contributed to this document and participated in the project meetings?
Yes

TABLE OF CONTENTS

LIST OF IMAGES

LIST OF TABLES

INTRODUCTION

- This plan describes the team, course, and project expectations
- The purpose of this plan is to organize the project deliverables into a schedule, identify risks, identify requirements, and manage the entire project.
- The scope of this plan is the duration of the course and the project itself. This includes the course and project deliverables.
- The plan is structured in terms of project logistics, project requirements, project scheduling, and project management.

Background

- Currently, ARGO's functional UI components are managed in the local project.
- The components are not shared across products, therefore cannot be centrally managed nor updated through a design system.
- Need a system that introduces component consistency and reusability
- Implementation is central and critical to the ARGO design system.

Broad Requirements

- Build ARGO Component Library using StorybookJS.
- (Optional) Implement Storybook Ecosystem CI for monitoring dependencies/packages.
- Standup environment for component library with URL.
- Develop 3 User Interfaces

PROJECT ORGANIZATION

Group Members

Name	Contact	Role	Rationale
Kevin Roa	kar180005@utdallas.edu	Group Leader, Developer	Leadership role decided via group decision.
Samuel Anozie	sca180003@utdallas.edu	Developer	Individual experience level
Saud Baig	ssb190008@utdallas.edu	Developer	Individual experience level
Aliah De Guzman	and180008@utdallas.edu	Developer	Individual experience level
Noah Turrin	nmt170002@utdallas.edu	Developer	Individual experience level
Te'a Washington	tvw190000@utdallas.edu	Developer	Individual experience level

Table 1. Group Members

Course Organizers

Name	Contact	Role
Eric Wong	ewong@utdallas.edu	Course Instructor
Li Dongcheng	dxl170030@utdallas.edu	Course TA
Chen Zizhao	zizhao.chen2@utdallas.edu	Course TA

Table 2. Course Organizers

Project Sponsors

Name	Contact	Role
Mark Bentsen	mark.bentsen@argodata.com	QA Manager (Main Contact)
Ponchai Reainthong	ponchai.reainthong@argodata.com	UX Director

Table 3. Project Sponsors

LIFECYCLE MODEL

- Agile (Scrum)
    - Every week is a new sprint
    - Based on the previous sprint:
        - Make necessary changes
        - Review sprint backlog to decide next course of action
        - Allocate tasks to group members
    - Meet 3 times weekly:
        - Monday: Meeting with ARGO
            - Discuss progress/issues/future/etc
        - Wednesday/Friday: Group meeting
            - Discuss current sprint
    - Provide weekly progress reports/demos
        - Get feedback, implement in next sprint
    - Deliver incrementally

- Rationale:**We chose scrum since it allows for flexibility when it comes to requirements changes and is an involved process that makes sure we are able to adapt to client needs. By getting consistent feedback, we are able to create useful features.**

RISK ANALYSIS

Risk	Severity	Likelihood	Reduction Strategy
Errors with infrastructure technology (e.g. Azure complications, Storybook.js complications)	High	Low, Azure will be set up by client company	Investigate up-to-date requirements for deploying Storybook.js to cloud services, especially Azure
Errors with integrating technology (e.g. Material UI style overrides have bugs)	Medium	Medium, is known to be an issue with framework technology	Create proof-of-concept for custom classes, or refrain from using frameworks all together.
CI/CD pipeline desyncs between deployments	High	Low	Reducing the amount of steps in deployment should reduce this risk, as well as implementing rollback capabilities.
Cached versions of deployed projects not updating on browser	High	Very Low, there should be internal code within Azure to stop this from happening	N/A
Restrictive customizability of components	Medium	Medium, depends on the implementation details and the requirements from the client	Flush out the implementation details from the client and develop the components accordingly
Team member sickness	Medium	High due to the flu and Covid season	Have clear documentation in case a team member has to take over a deliverable of the sick team member
Team member has heightened external workload (e.g Project in another course)	Medium	Medium	Communicate situation to group members. Adjust project schedule to fit reduced capabilities.

Table 4. Risk Analysis

HARDWARE & SOFTWARE RESOURCE REQUIREMENTS

Hardware

- Desktop/laptop computer
- Mobile phone

Software

- StorybookJS
- TypeScript/JavaScript
- React
- HTML
- CSS
- Azure
- MaterialUI for React
- Highcharts
- Golden-layout

Rationale: Hardware and software requirements have been specified by ARGO.

DELIVERABLES & SCHEDULE

Key	
CD	Course Deliverable
PD	Project Deliverable

Table 5. Deliverable Key

ID	Deliverable	Dependencies	Time Est.	People Est.	Rationale
CD1	Project Management Plan		3 days	6	Can complete with information from first sponsor meeting
CD2	Requirements Documentation	ARGO Project Proposal, CD1	10 days	6	Time-frame allows each member to ensure that the requirements encapsulate the scope of the project effectively
CD3	Architecture Documentation	CD2	10 days	6	Time-frame fits within the project timeline and allows for it to be used in a timely manner by design phase
CD4	Detailed Design Documentation	CD3	10 days	3	After the initial architecture documentation is complete, expanding on it should be doable within this time-frame
CD5	Testing Plan	Development Schedule	5 days	2	Will use automated testing tools

CD6	Final Project Report	CD1, CD2, CD3, CD4, CD5, PD1, PD2, PD3, PD4	7 days	6	Most of the content is from previous deliverables
CD7	Final Project Demonstration	PD1, PD2, PD3, PD4	5 days	6	Team has to include all project functionality in the presentation
PD1	Component Library (Simple Components) & Storybook JS Initialization	CD3	7 days	6	Implementing simple components will allow for early validation of the product.
PD2	Component Library (Advanced Components)	PD1, CD4	21 days	6	Will need a longer period of time to create advanced components compared to the simple components due to complexity
PD3	Component Library (Niche / Placeholder)	PD2	5 days	6	
PD4	<mark>Stocks Analysis UI</mark>	PD2	7 days	2	Team can split up to design all interfaces in a smaller timeframe
PD5	<mark>Social Media Analytics UI</mark>	PD2	7 days	2	Team can split up to design all interfaces in a smaller timeframe
PD6	<mark>Rotten Tomatoes Clone UI</mark>	PD1	7 days	2	Team can split up to design all interfaces in a smaller timeframe

Version 1.1

PD7	MCL Update System	PD1	10 days	3	Team can split up to work on update system

Table 6. Deliverables

MONITORING, REPORTING, & CONTROLLING MECHANISMS

Monitoring and Control Deliverables
- Requirements Traceability Matrix (RTM)
  - The use of RTM ensures that all requirements are accounted for, verifies that the requirements are met and align with project objectives, and tracks changes over the course of the project
- Review and Status Meetings
  - Regularly assess progress with sponsors, and identify any obstacles to a project or task.
  - Provide a platform for team members to communicate updates, address concerns, and ensure alignment towards the common goal.
- Project management tool (Notion)
  - Track the progress of deliverables, as well as who is responsible for each deliverable.
  - The developers can focus on the implementation of the deliverables.

PROFESSIONAL STANDARDS

The below standards are being set to ensure professionalism is upheld throughout the project's duration. It is imperative that the team adheres to these standards in order to ensure that the project is a success. Communication is heavily emphasized since it is the solution to a lot of problems.

- Team members should communicate on a regular basis with the team regarding any issues or blocks they are encountering
- The team should communicate with the stakeholders at Argo regarding any questions they may have
- Team members should come to meetings on time unless previously communicated
- Team members should not utilize unapproved materials for deliverables
- Team members should complete deliverables on time, however, if they are facing issues that could change the deliverable date these should be communicated ASAP

Refer to Appendix A for more details.

CONFIGURATION MANAGEMENT

Software: Google Sheets

Version In	Version Out	Changes	Reviewed By
0.0	1.0	Initial Document Creation	All Group Members; Mark Bentsen
1.0	1.1	Updated sections to contain info from ARGO proof of concept document. Added 1 additional area of risk. Expanded deliverables section to describe the 3 UIs.	All Group Members; Mark Bentsen

Figure 1. Revision History

REFERENCES

[1] "Project Monitoring and control techniques," *PMP® Blog - Project Management Professional Training*, 21-Oct-2019. [Online]. Available: https://www.projectmanagementqualification.com/blog/2019/10/21/project-monitoring-control/. [Accessed: 30-Jan-2023].

APPENDIX

Appendix A - Professional Standards Guidelines for Team Members

On the first occurrence of unacceptable behavior, determine the circumstances involved, resolve the problem, and document the event in the meeting minutes.

On a second occurrence, notify the instructor of the problem. A meeting will be set up to evaluate the situation and resolve the problem.

On a third occurrence, again notify the instructor of the problem. A meeting will be set up to evaluate the situation and resolve the problem. At this point, the team will have the *option* of removing the team member. If removed, then the team member receives a pro-rated grade based on the number of weeks they have participated in the group.

Examples of unacceptable behavior may include not delivering on time, delivering poor quality work, missing team meetings, being unprepared for team meetings, disrespectful or rude behavior, etc. Reasons such as "too busy" or "I forgot", or "my dog ate my design model" are unacceptable.

Valid reasons that must be considered include those listed for obtaining an incomplete standing in a course (illness, death in the family, travel for business or academic reasons, etc.)