Version 0.1

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 23/09/2023 | 0.1 | The initial project management plan | Riley Meyerkorth |
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Table of Contents

[1. Introduction 4](#_Toc146390740)

[1.1 Purpose 4](#_Toc146390741)

[1.2 Scope 4](#_Toc146390742)

[1.3 Definitions, Acronyms, and Abbreviations 4](#_Toc146390743)

[1.4 References 4](#_Toc146390744)

[1.5 Overview 5](#_Toc146390745)

[2. Project Overview 5](#_Toc146390746)

[2.1 Project Purpose, Scope, and Objectives 5](#_Toc146390747)

[2.2 Assumptions and Constraints 5](#_Toc146390748)

[2.3 Project Deliverables 6](#_Toc146390749)

[2.4 Evolution of the Software Development Plan 6](#_Toc146390750)

[3. Project Organization 6](#_Toc146390751)

[3.1 Organizational Structure 6](#_Toc146390752)

[3.2 External Interfaces 6](#_Toc146390753)

[3.3 Roles and Responsibilities 6](#_Toc146390754)

[4. Management Process 8](#_Toc146390755)

[4.1 Project Estimates 8](#_Toc146390756)

[4.2 Project Plan 8](#_Toc146390757)

[4.3 Project Monitoring and Control 8](#_Toc146390758)

[4.4 Quality Control 8](#_Toc146390759)

[4.5 Reporting and Measurement 8](#_Toc146390760)

[4.6 Risk Management 8](#_Toc146390761)

[4.7 Configuration Management 8](#_Toc146390762)

[5. Annexes 8](#_Toc146390763)

[5.1 Team Member Profiles 9](#_Toc146390764)

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# Introduction

## Purpose

The purpose of this Software Development Plan for *ShutterSort* is to collate all essential information and procedures to guide and control the development of cutting-edge automatic picture sorting software tailored for photographers. This plan provides a structured framework for the software's lifecycle, from its inception to deployment.

Key users and their interactions with the Software Development Plan are:

* **The Project Manager**: Utilizes this plan to craft the project timeline, determine resource requirements, and monitor progress in alignment with the stipulated schedule.
* **Project Team Members**: Rely on this document to ascertain their roles, responsibilities, and timelines. This plan also provides clarity on interdependencies between various team activities, ensuring smooth coordination and efficient workflow.

By adhering to the strategies and guidelines stipulated in this plan, we aim to ensure the timely delivery of *ShutterSort*, meeting both our technical specifications and the unique needs of the photography community.

## Scope

This Software Development Plan outlines the overarching strategy and procedures for the development and deployment of the *ShutterSort* application. *ShutterSort* is envisioned to be a premier tool, designed meticulously to automatically sort and categorize pictures for photographers by analyzing metadata, pixel data, and other information.

The scope of this plan covers the entirety of the ShutterSort project. It provides direction and structure for all phases, from initial conceptualization to the final deployment, ensuring that stakeholders at all levels have clarity on their roles and responsibilities.

Any other project or initiative that may be influenced or informed by this Software Development Plan will be referenced accordingly, maintaining transparency and synergy amongst all associated undertakings.

## Definitions, Acronyms, and Abbreviations

N/A (See the Project Glossary)

## References

This subsection lists all anticipated documents and resources that will be referenced throughout the *ShutterSort* Software Development Plan. As the project is in its very early stages, some of these documents are yet to be developed. They will be updated with detailed references as they become available.

* **Meeting Logs/Notes**: A record of discussions, decisions, and action items from project meetings, providing context and rationale for project direction and decisions.
* **GitHub Repository**: The central hub for our codebase, documentation, and any associated digital assets. This repository will keep track of all version changes and provides a platform for collaborative development. [Link to the GitHub repository].
* **Other Supporting Documents**: This will encompass various documentation produced during the project, such as technical specifications, user manuals, testing protocols, and more.

All referenced documents and resources will be made available to the team, either via our shared Canvas page and/or GitHub repository, ensuring easy access and transparency for all stakeholders.

## Overview

This *Software Development Plan* contains the following information:

* Project Overview - provides a description of the project's purpose, scope, and objectives.  It also defines the deliverables that the project is expected to deliver.
* Project Plan - describes the organizational structure of the project team.
* Team Member Information, Roles Responsibilities – describes the team members, their roles, and their responsibilities in the project

# Project Overview

## Project Purpose, Scope, and Objectives

**Purpose**

The primary purpose of *ShutterSort* is to simplify and streamline the process of categorizing and organizing photographs for photographers. In today's digital age, photographers often find themselves sifting through vast collections of photographs, making efficient organization paramount. *ShutterSort* aims to alleviate this burden by automating the sorting process based on robust metadata analysis.

**Scope**

The *ShutterSort* application will:

* Interface with various camera models and storage drives to access photographs.
* Extract and analyze metadata from photographs to determine categorization criteria.
* Automatically sort and categorize photographs based on the analysis.
* Provide a user-friendly interface for photographers to oversee and adjust the sorting process if needed.
* Ensure compatibility with a broad range of computer operating systems to cater to a wide user base.

**Objectives**

* Develop a reliable and efficient algorithm to analyze and categorize photographs based on metadata.
* Deliver a seamless user experience ensuring ease of use even for those less technically inclined.
* Offer customization options, allowing photographers to set specific parameters for sorting.
* Ensure data privacy, making sure that no photo data is accessed beyond the application's primary purpose.
* Launch a finalized version by the end of this semester.
* Finalize and release the application to the public within one year, post any required revisions based on feedback.

By achieving these objectives, *ShutterSort* aims to become an indispensable tool in every photographer's digital toolkit, saving them time and enhancing productivity.

## Assumptions and Constraints

Identifying constraints are a very important part of any team project. The current constraints that are visible are:

* **Team meeting/scheduling issues**: everyone’s schedules are different, and thus it is hard to pinpoint an exact time that everyone can meet
* **Differing Skillsets**: Some members may be more experienced with languages like C++ than others
* **Schooling and Other Responsibilities**: no one on the team cannot give their entire life to this project. Each member has different classes, family obligations, and other things that require attention.

## Project Deliverables

The following list provides a breakdown of the primary artifacts and deliverables to be created and presented throughout the development of the *ShutterSort* project within the semester:

* Requirement Specifications Document:
  + Description: A comprehensive document detailing the functional and non-functional requirements of the *ShutterSort* application.
  + Target Delivery Date: October 10, 2023
* Design Documents:
  + Description: Incorporates wireframes, system architecture diagrams, and user interface mockups that will define the look and structure of ShutterSort.
  + Target Delivery Date: October 24, 2023
* Prototype/Beta Version:
  + Description: An initial working version of *ShutterSort* that showcases its core features and functionalities. This will be used for preliminary testing and feedback.
  + Target Delivery Date: November 14, 2023
* Testing Report:
  + Description: Document detailing the results of testing the prototype, including identified bugs, issues, and feedback.
  + Target Delivery Date: November 28, 2023
* Final Application & Presentation:
  + Description: The completed *ShutterSort* application accompanied by a presentation that covers its development process, features, and a demonstration.
  + Target Delivery Date: December 10, 2023
* Documentation & User Manual:
  + Description: A comprehensive guide detailing the usage of *ShutterSort*, including step-by-step instructions, troubleshooting tips, and FAQs.
  + Target Delivery Date: December 12, 2023

Each deliverable will be presented upon completion for feedback and review, ensuring alignment with course expectations and requirements. These dates are ***very*** applicable to change, as this project is in it’s early phases.

## Evolution of the Software Development Plan

As with all projects, the *Software Development Plan* will be revised throughout the project, usually at the start of each Sprint/phase.

# Project Organization

## Organizational Structure

N/A (Describe the organizational structure of the project team, including management and other review authorities)

## External Interfaces

N/A

## Roles and Responsibilities

**Project Leader/Team Administrator**

* Member(s): Riley Meyerkorth
* Responsibilities
  + Oversee all project activities, ensuring tasks are being completed on time and align with project objectives.
  + Act as the primary point of contact between the team and any external stakeholders; facilitate team meetings and discussions.
  + Allocate resources and members effectively, managing timelines and resolving any conflicts or issues that arise.

**Lead Developer**

* Member(s): Sam Aven
* Responsibilities
  + Provide technical leadership and make critical decisions on software architecture and development tools.
  + Conduct code reviews and manage the integration of different pieces of code into a coherent application.
  + Guide and support other developers, helping to resolve technical challenges and ensuring code quality.

**Documentation Technician**

* Member(s): Colin Treanor
* Responsibilities
  + Generate comprehensive documentation for the software, including user manuals, system specifications, and API documentation.
  + Update documentation based on feedback from developers, testers, and end-users.
  + Ensure that all documentation is clear, concise, and accessible to all relevant stakeholders.

**QA Lead**

* Member(s): Alex Doehring
* Responsibilities
  + Develop detailed test plans to ensure software functionality, performance, security, and other aspects meet specified requirements.
  + Identify, document, and report bugs and issues found during testing.
  + Oversee the overall quality of the final product, ensuring that it meets the established quality standards.

**Front-End Lead**

* Member(s): Ryland Edwards
* Responsibilities
  + Lead the design and development of the user interface and user experience.
  + Ensure the front-end is optimized for performance, usability, and accessibility.
  + Ensure compatibility across various devices.

**Creative Director**

* Member(s): Nicholas Holmes
* Responsibilities
  + Define and oversee the visual identity and aesthetics of the application, ensuring a coherent and appealing design.
  + Ensure consistency in visual elements and branding across all user-facing materials.
  + Collaborate with the Front-End Lead and other team members to incorporate design elements effectively and gather feedback.

**Developer**

* Member(s): All
* Responsibilities
  + Develop clean, efficient, and maintainable code based on specified requirements and design.
  + Solve complex programming challenges and contribute to the application's functionality.
  + Work closely with other team members, particularly the Lead Developer, to integrate individual components and communicate progress and challenges.

*\*These roles may be rotated throughout the time of the project’s completion*

# Management Process

## Project Estimates

**N/A**

## Project Plan

N/A

### Phase Plan

N/A (when it comes to the coding, if we decide to incrementally program, this is the best place to describe each iteration of the process)

### Iteration Objectives

N/A (Briefly list the objectives to be accomplished for each of the iterations and Refer to the related **Iteration Plan Documents** for more details)

### Releases

N/A

### Project Schedule

This project is due at the end of the semester in December 2023.

### Project Resourcing

Team members of the project are expected to have the following:

* Taken EECS 268
* Availability to be present at most meetings

## Project Monitoring and Control

## **Quality Control**

N/A

## **Reporting and Measurement**

**N/A**

## **Risk Management**

**The biggest risk is a team member who is key to the project leaving or dropping the course**(Risks will be identified in Inception Phase using the steps identified in the RUP for Small Projects activity “Identify and Assess Risks”. Project risk is evaluated at least once per iteration and documented in this table.)

## **Configuration Management**

The change requests and versions will be controlled automatically via a GitHub repository.

# Annexes

The project will follow the UPEDU process.

Other applicable process plans are listed in the references section, including Programming Guidelines.

All current availability for team members can be found visually on this website: <https://www.when2meet.com/?21207301-fWDO2>

## Team Member Profiles

### Riley Meyerkorth

* Pronouns: He/Him
* Skills: Python, C, C++, C#, SQL, Java, Swift, HTML, CSS, JavaScript, Qt
* Availability:
  + Sunday: 11:00AM – 10:00PM
  + Monday: 2:30PM – 10:00PM
  + Tuesday: 4:30PM – 10:00PM
  + Wednesday: 5:00PM – 10:00PM
  + Thursday: 10:00AM – 12:00PM, 4:30PM – 10:00PM
  + Friday: 9:00AM – 11:00AM, 3:00PM – 10:00PM
  + Saturday: 10:00AM – 10:00PM
* Contact Information:
  + [rileymeyerkorth@gmail.com](mailto:rileymeyerkorth@gmail.com)
  + +1 (785) 242-7245
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website: <https://restlessmedicine.com>

### Sam Aven

* Pronouns: He/Him
* Skills: Python, C, C++, C#, Java, Swift, SQL, Ruby, HTML, CSS, JavaScript, Liquid
* Availability:
  + Sunday: 8:00AM – 12:45PM, 4:30PM – 10:00PM
  + Monday: 8:00AM – 10:00AM, 3:45PM – 10:00PM
  + Tuesday: 8:00AM – 10:00AM, 6:45PM – 10:00PM
  + Wednesday: 4:00PM – 10:00PM
  + Thursday: 8:00AM – 12:15PM, 5:00PM – 10:00PM
  + Friday: 8:00AM – 10:00AM, 1:45PM – 9:15PM, 9:45PM – 10:00PM
  + Saturday: 8:00AM – 9:15PM, 9:45PM – 10:00PM
* Contact Information:
  + [samjaven33@gmail.com](mailto:samjaven33@gmail.com)
  + +1 (636) 368-5880
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website:

### Ryland Edwards

* Pronouns: He/Him
* Skills: Python, HTML, CSS, JavaScript
* Availability:
  + Sunday: 5:00PM – 9:30PM
  + Monday: 4:00PM – 5:30PM
  + Tuesday: 9:15AM – 12:00PM
  + Wednesday: N/A
  + Thursday: N/A
  + Friday: 9:30AM – 12:00PM
  + Saturday: 12:00PM – 5:00PM
* Contact Information:
  + [rylandcedwards@gmail.com](mailto:rylandcedwards@gmail.com)
  + +1 (913) 401-5751
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website:

### Nicholas Holmes

* Pronouns: He/Him
* Skills: Python, Excel (expertise)
* Availability:
  + Sunday: 4:00PM – 8:00PM
  + Monday: 10:00AM – 1:00PM, 5:00PM – 8:00PM
  + Tuesday: 9:00AM – 11:00AM, 7:00PM – 9:00PM
  + Wednesday: 10:00AM – 1:00PM, 5:00PM – 8:00PM
  + Thursday: 7:00PM – 9:00PM
  + Friday: N/A
  + Saturday: N/A
* Contact Information:
  + [nmholmes@ku.edu](mailto:nmholmes@ku.edu)
  + +1 (785) 479-1419
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website:

### Colin Treanor

* Pronouns: He/Him
* Skills: Python
* Availability:
  + Sunday: 8:00AM – 10:00PM
  + Monday: 5:15PM – 10:00PM
  + Tuesday: 3:45PM – 10:00PM
  + Wednesday: 5:45PM – 10:00PM
  + Thursday: 4:00PM – 10:00PM
  + Friday: 5:30PM – 10:00PM
  + Saturday: 8:00AM – 10:00PM
* Contact Information:
  + [colin.treanor@ku.edu](mailto:colin.treanor@ku.edu)
  + +1 (708) 770-0812
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website:

### Alex Doehring

* Pronouns: He/Him
* Skills: Python, C, C++, Java
* Availability:
  + Sunday: 4:45PM – 10:00PM
  + Monday: 8:00AM – 10:30AM, 4:15PM – 10:00PM
  + Tuesday: 8:00AM – 10:30AM, 4:15PM – 10:00PM
  + Wednesday: 8:00AM – 10:30AM, 3:30PM – 10:00PM
  + Thursday: 8:00AM – 10:30AM, 6:00PM – 10:00PM
  + Friday: 8:00AM – 10:30AM
  + Saturday: 1:00PM – 4:00PM
* Contact Information:
  + [alexdoehring@ku.edu](mailto:alexdoehring@ku.edu)
  + +1 (636) 578-6375
* Related Classes/Courses: EECS 168, EECS 268, EECS 140, EECS 210, EECS 348
* Website: