Park Station Manufacturing

# Software Design Template

Version 1.0

## Table of Contents

[Software Design Template 1](#_Toc21086455)

[Table of Contents 2](#_Toc21086456)

[Document Revision History 2](#_Toc21086457)

[Executive Summary 3](#_Toc21086458)

[Requirements 3](#_Toc21086459)

[Design Constraints 3](#_Toc21086459)

[Rationale 3](#_Toc21086460)

## Document Revision History

| Version | Date | Author | Comments |
| --- | --- | --- | --- |
| 1.0 | 09/14/2025 | Crisitano Miranda | Updated the executive summary, requirements, design constraints, and rationale. |

Instructions: Fill in all bracketed information on page one (the cover page), in the Document Revision History table, in the footer, and below each header. Under each header, remove the bracketed prompt and write your own paragraph response covering the indicated information.

## Executive Summary

Park Station Manufacturing is requesting the ability to produce instructional video clips for the purpose of educating its customers on how to use its products. They seek to utilize specific video editing software that runs exclusively on macOS, as the company prefers macOS for its superior desktop publishing capabilities. However, the company can currently only use Windows OS.

## Requirements

Park Station Manufacturing needs to be able to edit and save video clips and then distribute these clips to their customers. The specific editing software requires computer systems that can run macOS. Additionally, the company wants the publishing to be as seamless as possible, so they plan to switch to and utilize macOS. The company needs to replace its current computer systems with new ones that support macOS.

## Design Constraints

1. The client needs multiple licenses that provide continuous access to their desired high-quality video editing software
2. Client requests using macOS only
3. Client requires new computer systems that support macOS

## Rationale

Each of the listed design constraints must be accounted for when constructing the design plan for the project. For instance, one of the primary design constraints is that the company will need to purchase licenses to use its chosen video editing software. For this constraint, it is both a technological and business constraint as the design plan needs to consider hardware compatibility and software licensing. Video editing is resource-intensive, so the computer systems the company uses will need to meet at least the minimum requirements to run the software. The plan also needs to consider how the video clips will be stored and distributed to customers, which requires additional hardware or reworking existing hardware to account for sharing and storing videos. In terms of business constraints, this design constraint also highlights that the company needs to consider whether multiple licenses need to be purchased and whether these licenses require annual renewal. For the second design constraint, the company's choice to utilize macOS only creates a software constraint that the design plan must account for. For example, the design plan must ensure that the currently used software and other physical hardware are compatible with macOS, so that the company's daily operations are not affected by this change. Finally, another design constraint arises from this choice of operating systems, which is that the company now has access only to computer systems compatible with Windows OS. This constraint is both technical and business, as the design plan must again account for switching out hardware to macOS compatible computer systems and ensure that they will properly function with any existing technological infrastructure. Additionally, this change will require money to implement, and thus, some of the budget for this project will need to be allocated towards buying new computer systems.