Software Requirements Specification

for

UPOD - Graphics/Animation

**Version 0.1**

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**May 17 2016**

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**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Tom West | 31/05/16 | Aligned Introduction & Formatting | v0.2 |
| Jeffrey Chung | 23/05/16 | Initial Draft | v0.1 |

# Introduction

## Purpose

This collection of requirement documents outlines the visual and functional design choices made in order to update the Laurier UPOD site. The UPOD site should:

1. Contain all relevant (accurate) information a first year physics undergraduate student would need to access in reference to their courses.
2. Be easy to navigate, as students generally stop looking unless information is easily available
3. Be responsive, as students generally are on tight timelines, and don’t have time for sites to load slowly.

## Product Scope

UPOD (Undergraduate Physics Online Database) is a website designed to the students with information about physics. The goal is to provide accurate and up to date physics knowledge for undergraduate students. There are currently very few quality physics reference sites, so UPOD has the opportunity to fill a large gap facing physics students at present.

# Overall Description

## Product Perspective

## Product Functions

## User Classes and Characteristics

## Operating Environment

## Design and Implementation Constraints

# External Interface Requirements

## User Interfaces

## Hardware Interfaces

## Software Interfaces

## Communications Interfaces

# Project features

## How it fits the project

The animations we will create with SVG will allow the user to gain a better understanding of Physics concepts through interactive diagrams. We are hoping to create 5-15 animations touching on each of the physics categories in UPOD. The specific diagrams to be animated will be on decided in tandem with the Physics Research group.

## Users

The main people who will use it will be the students who are the users and then the people in charge of the UPOD app are the Admins. The Users will be interacting with the animations that we create. They will be able to change the parameters of the diagrams and an altered diagram will be displayed. Then the Admins will be able to decide which diagrams are available and will also have the ability to turn off the interactive portion of the diagrams.

## List of main features

-Some runtime environment

-Model (MVC)

-Represents the equation or physics concept illustrated

-View (MVC)

-Sliders, buttons, and other UI elements to interact with the model

-Objects to reflect inputs and demonstrate concepts

-Controller (MVC)

-Liases and controls the view to reflect the model