TEST PLAN DEFINITION

A Software Test Plan is a document describing the testing scope and activities. It is the basis for formally testing any software/product in a project.

# ISTQB Definition

* **test plan**: A document describing the scope, approach, resources and schedule of intended test activities. It identifies amongst others test items, the features to be tested, the testing tasks, who will do each task, degree of tester independence, the test environment, the test design techniques and entry and exit criteria to be used, and the rationale for their choice, and any risks requiring contingency planning. It is a record of the test planning process.
* **master test plan**: A test plan that typically addresses multiple test levels.
* **phase test plan**: A test plan that typically addresses one test phase.

# TEST PLAN TYPES

One can have the following types of test plans:

* **Master Test Plan**: A single high-level test plan for a project/product that unifies all other test plans.
* **Testing Level Specific Test Plans**: Plans for each level of testing.
  + Unit Test Plan
  + Integration Test Plan
  + System Test Plan
  + Acceptance Test Plan
* **Testing Type Specific Test Plans**: Plans for major types of testing like Performance Test Plan and Security Test Plan.

# TEST PLAN GUIDELINES

* Make the plan concise. Avoid redundancy and superfluousness. If you think you do not need a section that has been mentioned in the template above, go ahead and delete that section in your test plan.
* Be specific. For example, when you specify an operating system as a property of a test environment, mention the OS Edition/Version as well, not just the OS Name.
* Make use of lists and tables wherever possible. Avoid lengthy paragraphs.
* Have the test plan reviewed a number of times prior to baselining it or sending it for approval. The quality of your test plan speaks volumes about the quality of the testing you or your team is going to perform.
* Update the plan as and when necessary. An outdated and unused document stinks and is worse than not having the document in the first place.

# TEST PLAN TEMPLATE

*The format and content of a software test plan vary depending on the processes, standards, and test management tools being implemented. Nevertheless, the following format, which is based on IEEE standard for software test documentation, provides a summary of what a test plan can/should contain.*

## Test Plan Identifier: TP 1

* Provide a unique identifier for the document. (It would be good to have a pattern of identifiers for your proposal, test plan, test cases, scripts, etc.)

## Introduction:

* Provide an overview of the test plan.
* Specify the goals/objectives.
* Specify any constraints.

## References:

* List the related documents, with links to them if available, including the following:
  + Senior Project Design Proposal
  + Requirements Specification

## Test Items:

* Computer
* Internet Connection
* Visual Studio Code
* Reveal.js

## Features to be Tested:

* If video player code works properly
* If video player is recording (See Requirement #4)
* If audio is being recorded during the video presentation
* If the audio can be played back while watching the recorded video presentation (See Requirement #1)
* If the video presentation looks like a video recording (See Requirement #4)
* Each HTML feature that was added (See Requirement #2 and #3)

## Features Not to Be Tested:

* N/A

## Approach:

* The overall approach to testing is to run the video presentation code from the beginning to test and make sure that the audio and video are being recorded

## Item Pass/Fail Criteria:

* Specify the criteria that will be used to determine whether each test item (software/product) has passed or failed testing.
* Requirement #1 will pass as long as the audio and video are successfully recorded during the presentation
* Requirement #2 will fail if the code for a clickable link is not written properly
* Requirement #2 will pass as long as the clickable links are reached successfully
* Requirement #3 will fail if the code for searching for a word within the video at a particular time is not written properly
* Requirement #3 will pass as long as the word that is searched for within the video at a particular time is found
* Requirement #4 will fail if the code for the look and feel of a video player is not implemented correctly
* Requirement #4 will pass as long as the video player looks and feels like a video recording

## Suspension Criteria and Resumption Requirements:

* N/A

## Test Deliverables:

* List test deliverables, and links to them if available, including the following:
  + Test Plan (this document itself)
  + Requirements Specification
  + Senior Project Design Proposal

## Test Environment:

* GitHub
* Reveal.js
* Visual Studio Code
* Storyteller Plugin for Visual Studio Code

## Estimate:

* N/A

## Schedule:

* See Design Proposal for detailed schedule

## Staffing and Training Needs:

* N/A

## Responsibilities:

* Mark Neitzel
* Create and program code
* Write test cases
* Write Test Plan Specification and Requirement Specification documents
* Add HTML features to the code
* Dr. Hayes
* Review project
* Help assist when needed

## Risks:

* N/A

## Assumptions and Dependencies:

* N/A

## Approvals:

Senior Project Advisor, Dr. Hayes, will approve before test participants use the player and recorder.