PROJECT PLAN

RETRO ROBOTS

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# Scope

This document contains the Project Plan established to develop the software Wheel of Jeopardy v. 1.0

## Project Objectives

The objective of this project is to provide an implementation of the game Wheel of Jeopardy. This project will deliver 4 software increments, defined as skeletal, minimum, target and dream as defined below.

## Life Cycle Description

The software will be developed utilizing the iterative/incremental life cycle. See fig.1

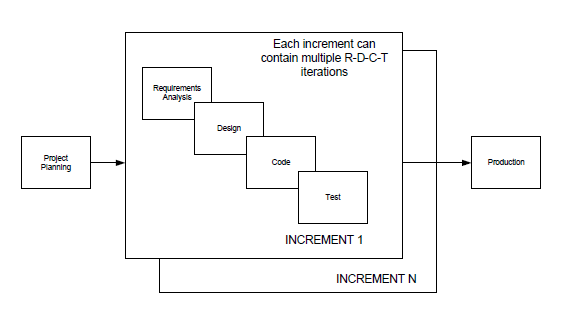


Fig. 1 Software Life Cycle Model

Source: Module 2 Slides

**Features of Four Increments**

1. **Skeletal Increment**

* Subsystems
  + Players
  + Game logic
  + GUI
* Features
  + Take player input for questions and answers and process
  + Read local files to retrieve questions
  + Display questions with given category in order
  + Update(answer correct/incorrect) and track scores
  + Opponents chooses the category
  + Counter to track remaining spins in the round

1. **Minimal Increment**

* Subsystems
  + Database
  + Server
  + GUI
* Features
  + Player sends request to server
  + Retrieve information from database

1. **Target Increment**

* Subsystems
  + Database
  + Server
  + GUI
* Features
  + A functional playable game
  + Satisfy all requirements outlined

1. **Dream Increment**

* Allow user to choose certain categories for the whole game
* Animation of the wheel and sound effect
* A version in another language, e.g., Chinese
* Save user’s account information to allow multiple logins

## Work Products

The following deliverables will be produced

1. Vision Document
2. Software Requirements Specification
3. Software Design Document
4. Skeletal System Demo
5. Minimum System Demo
6. Target System Demo
   1. **Milestones**

The following milestones are planned.

| **Milestone** | **Expected Date** |
| --- | --- |
| **Planning Complete** | 06/28/2022 |
| **Software Requirements Complete** | 07/12/2022 |
| **Skeletal Increment Complete** | 07/19/2022 |
| **Software Design Complete** | 08/02/2022 |
| **Minimum Increment Complete** | 08/09/2022 |
| **Target System Complete** | 08/23/2022 |

Table 1. Milestones

# Organizational Structure

## 2.1 Team Structure

**Project Manager:** Tatiana Correia

**Lead GUI Developer:** Keegan Riley

**Lead Software Architect:** Wenjun Zhou

**Lead Tester:** Nick Champagne

**Lead Configuration Manager:** Keegan Riley

**Lead Quality Manager:** Tatiana Correia

## 2.2 Work Breakdown Structure

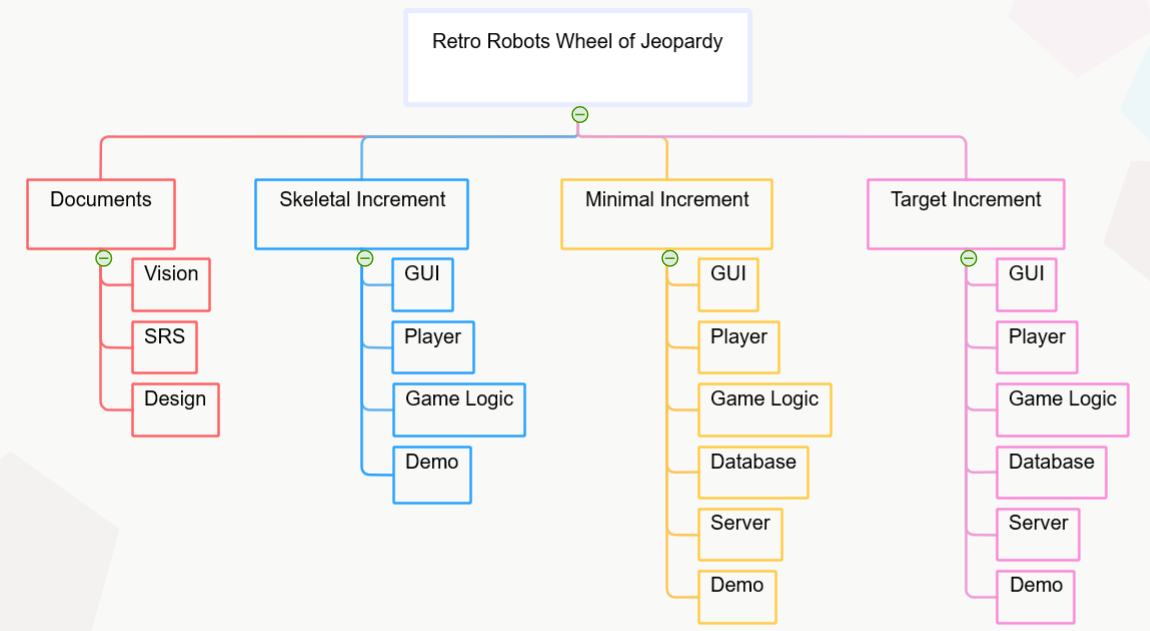


Fig. 2 WBS

## 2.3 Project Schedule

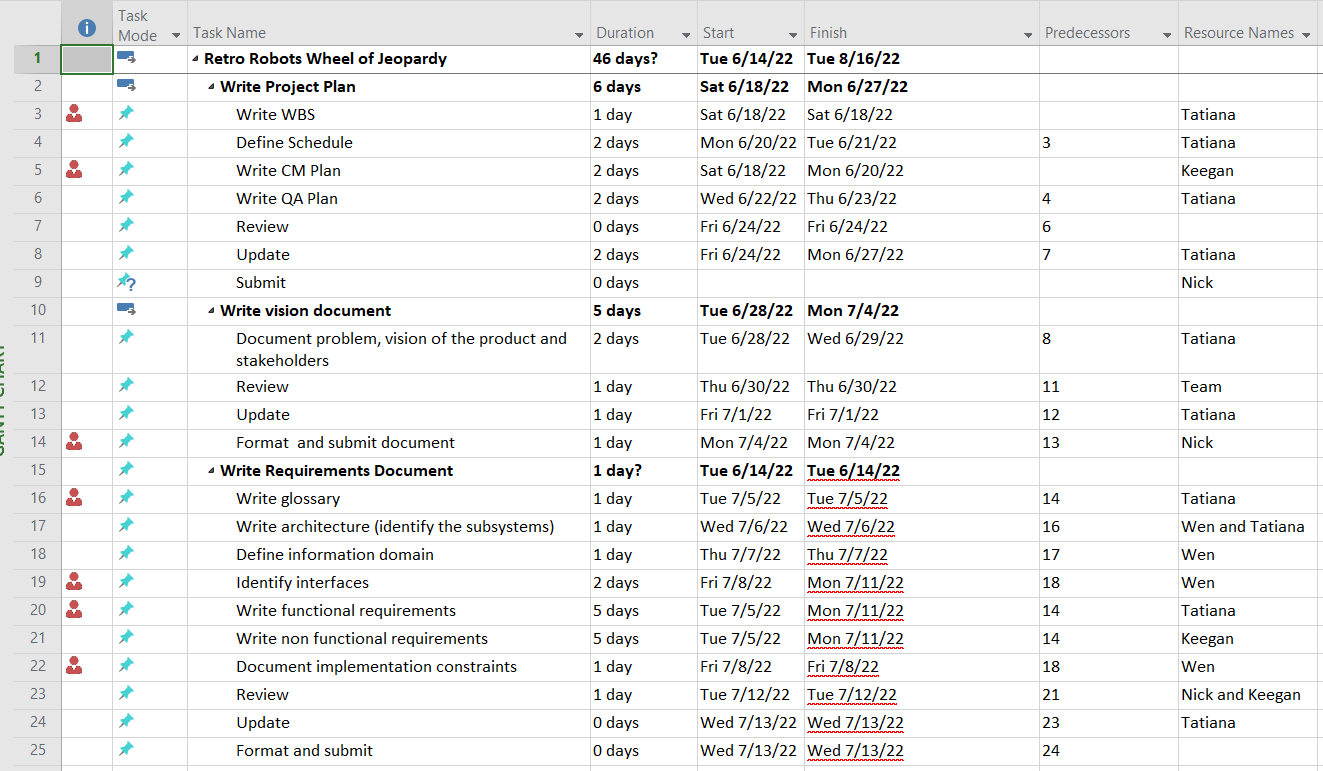






Fig. 3 Schedule

# Risk Assessment Plan

The main risk for this project is schedule risk. Schedule risk is caused by inadequate estimates, inaccurate assumptions, delay in activities caused either by a team member assigned to other projects, personal emergencies or by a delay in a predecessor activity. Schedule risk mitigation consists in periodic meetings to monitor and control the schedule and assignment of more than one team member to critical tasks.

# Quality Plan

Quality assurance processes will consist of reviews, dynamic tests and configuration control. Reviews will be conducted by independent reviewers.

Software Requirements shall be reviewed according to the following criteria:

* Unambiguous
* Testable
* Complete
* Consistent with other requirements

Software Design Document shall be reviewed according to the following criteria:

* Modularity
* Low coupling
* High cohesion
* Encapsulation

Team will adopt the following coding standard:

Software code will be tested dynamically, per below test plan.

Integrity of builds and baselines will be maintained per below configuration management plan.

## 5.1 Test Plan

## 5.2 Configuration Management Plan

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