

Game Design Document

My videogame Golden Robot for the Digital Arts Nanodegree of Udacity

<https://youtu.be/3mnxa5X6xvg>

GitHub Repository:

https://github.com/jckuri/golden_robot

A GDD (game design document) is a highly descriptive, living document of the design of a video game. It helps to define the game details and features you intend for your game.

Completing a draft of this document upfront and then revisiting it to add and update it during your game development process is recommended. The final version of this document does not necessarily need to represent the final version of your game.

While not all of this information will directly impact your finished **2D Platformer Game** build, it will help you plan the project, source the assets, and develop the game.

Please complete **all** of the numbered bullet points below.

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Game Design Sketch

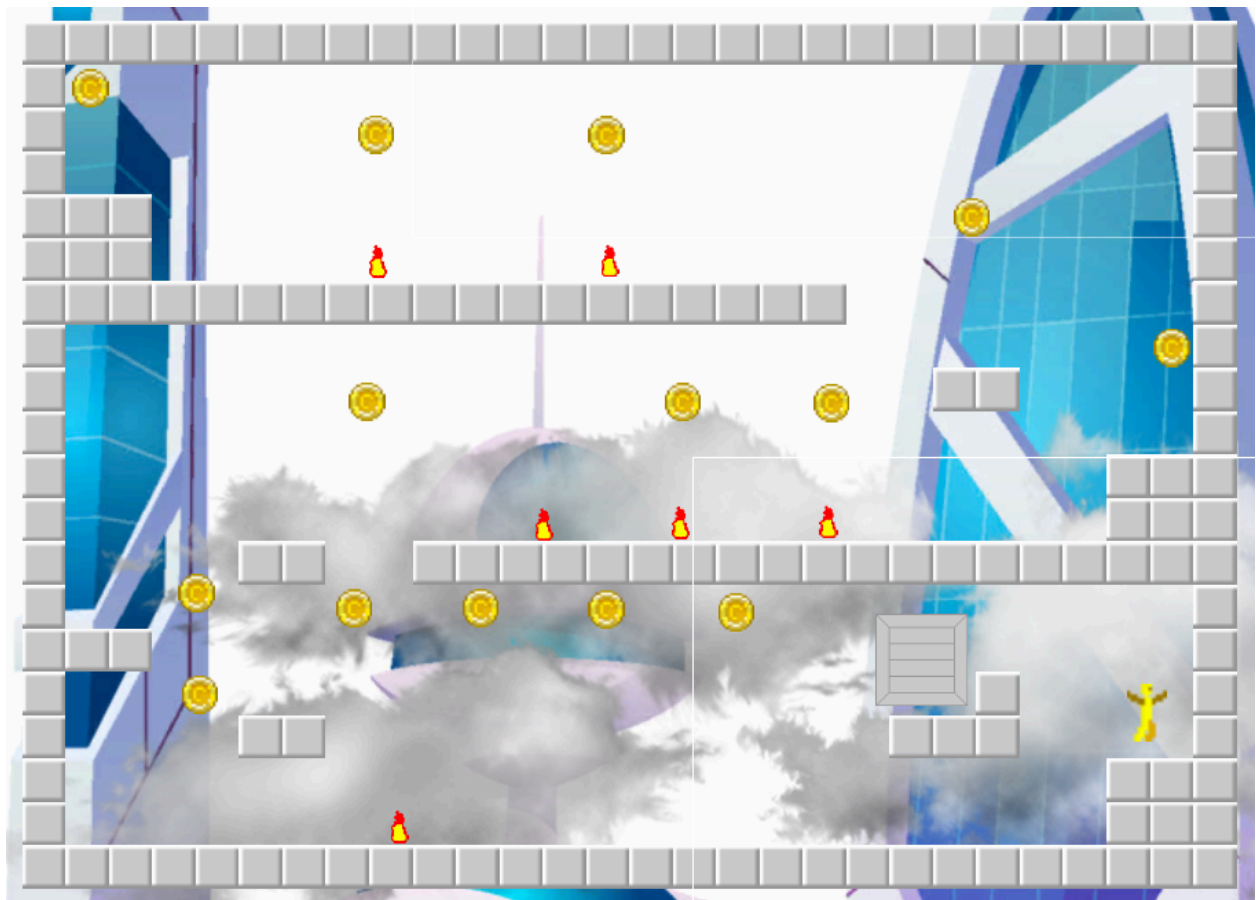
This section includes at least one game design sketch that you create. It communicates your ideas for the game, such as its appearance, structure, and behavior. The sketch(es) need to show 3 tile map layers and 2 or more user interface elements. Optionally, the sketch(es) may include additional elements as you like.

- **1. Add your sketch(es) here**

Motion parallax has 3 layers:

Midground layer

The midground layer contains all the blocks, coins, the crate, and the initial position of golden robot. It has the structure of the video game.



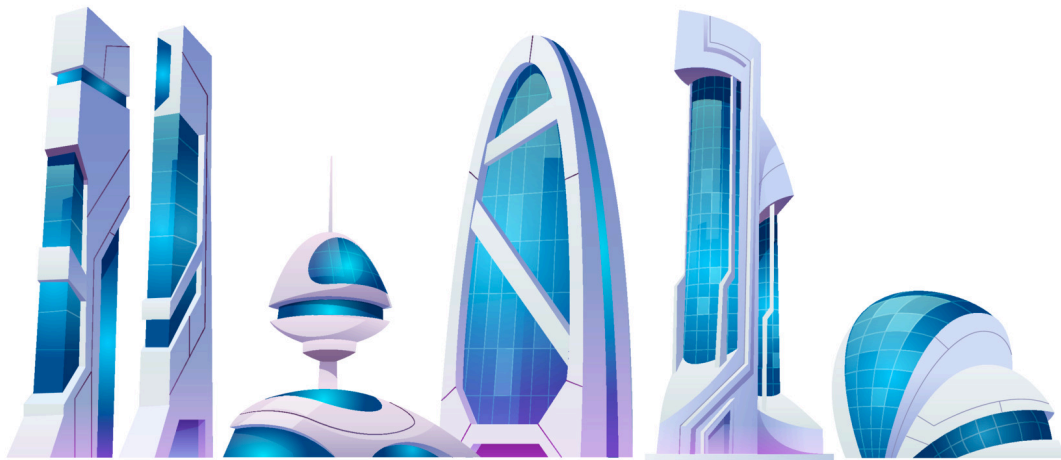
Cloud layer

The cloud layer has fully transparent pixels, partially transparent pixels, and fully opaque pixels representing the clouds, which are between the midground layer and the background layer.



Background layer

The background is simple and futuristic like golden robot.



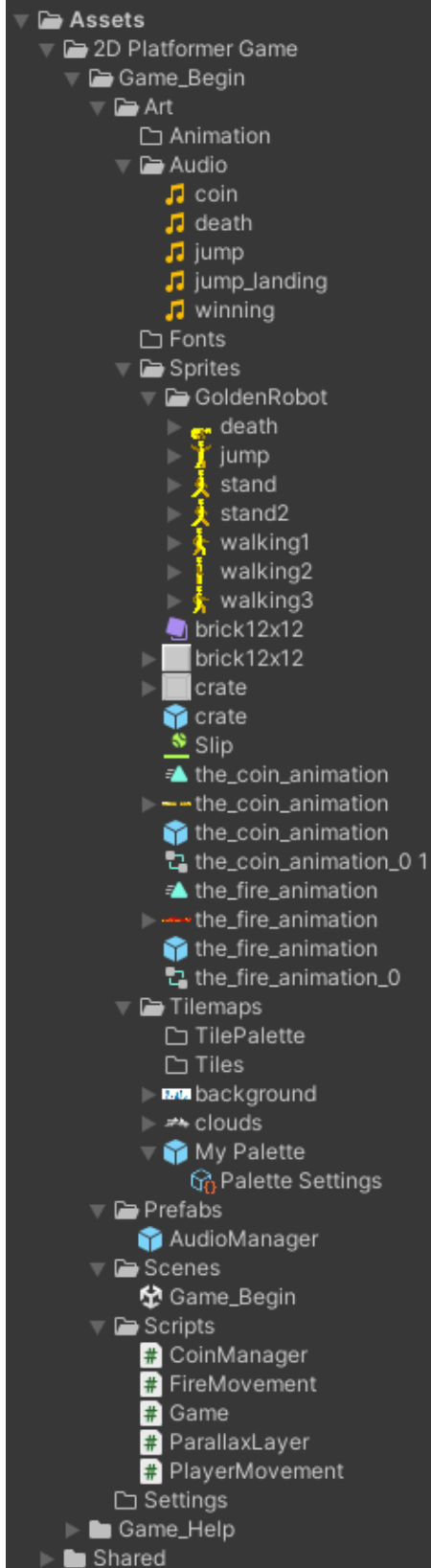
The game has blocks, fires, coins, a crate, and the player Golden Robot.

The UI has 3 elements:

1. The Restart button;
2. a text with information about the coins collected and the total amount of coins to be collected;
3. and a text with status information about game instructions, winning, and game over.



UnityProjectWindow.png



Game Concept

This section describes the game's story, environment, characters, etc.

- **2. What is the storyline or narrative of your game?**

Golden Robot is a 2D Platformer Game whose objective is to collect 14 coins while avoiding the fires. This video game is simple and straightforward. Even novice players can win the video game in less than 1 minute.

Golden Robot has to collect gold coins in order to fix its body parts made of gold. Fires can actually damage electronics. Only in movies, robots are bullet-proof and fire-proof. Blocks and the crate are made of silver.

- **3. What are the main characters and objects in your game, and what roles do they play in the story and gameplay?**

The main character is Golden Robot who has to avoid the fires and collect all the 14 coins in order to win the video game. Correctly using the crate in the game is mandatory. Otherwise you won't be able to collect some coins. The video game has many blocks which create the structure of the virtual world.

Here are the sources for the audio in the video game. As you can see they are free to use.

Depth Charge - Critical Battery Alarm.wav

<https://freesound.org/people/liquidhot/sounds/98365/>

(This is the game over sound.)

Robot Love Scream.flac

<https://freesound.org/people/qubodup/sounds/197256/>

(This is the winning sound.)

Collecting Coins

https://freesound.org/people/Philip_Berger/sounds/693840/

(This is the sound of collecting coins.)

Robot Jump 2.wav

<https://freesound.org/people/Modus7/sounds/238282/>

(This is the sound for jumps.)

Here are the sources for the visual art in the video game. As you can see they are free to use.

Future city futuristic buildings with glass facade Free Vector

<https://www.vecteezy.com/vector-art/15485710-future-city-futuristic-buildings-with-glass-facade>

(This is the futuristic background.)

Cloud PNG image with transparent background | cloud_PNG112204.png

<https://pngimg.com/image/112204>

(These are the clouds.)

Rotating Coin

<https://opengameart.org/content/rotating-coin>

(These are the sprites for the coins.)

I drew pixel by pixel the sprites for the golden robot, the fires, the blocks, and the crate. And that's why they are very simplistic and imperfect. It's my own honest work.

Game Mechanics

This section includes the core gameplay mechanics, input controls, and how the player interacts with the game.

- **4. What is the complete list of input actions that the player can perform, and how do these actions impact the game world?**

Golden Robot can move with the left arrow and the right arrow. Golden Robot can jump with the up arrow. Golden Robot can push the crate by walking toward it.

- **5. What is the typical gameplay loop (repeated actions) for the player?**

Golden Robot has to avoid the fires and collect all the 14 coins in order to win the video game. If the robot touches one of the fires, the game is over. Correctly using the crate in the game is mandatory. Otherwise you won't be able to collect some coins.

Optional: Standout Suggestions

This section contains "Standout Suggestions" for your game. These are game mechanics or other game features that aren't necessary for your game, but that would be great additions if you have the spare time. Adding such extras can really make your game shine. So, if you complete your game ahead of schedule, you might think about adding one or more of these ideas. *For example, the following are standout suggestions that are relevant for a 2D Platformer type of game.*

- **6. Playable Character Double Jump**

Not implemented.

- **7. Breakable Crate Object**

Not implemented.

- **8. Enemy Character AI**

Not implemented.