Game Design Document

RougyMon



Team Name HereSAE GPD415

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**Game Charter**

The game charter provides information about how the team plans to execute its mission (create a video game). Every team member should agree to the contents of the game charter, as it defines the expectations, guidelines and rules for the team.

**Mission Statement**

This is the statement of the intent or objectives for the team’s final project. It should broadly state the goal of the game, team, and the process of making your game. It is a good idea to include information about what game you are making, why your game will be great, and what the team expects to learn from the project.

**Meeting Schedule**

* We will meet every Tuesday from 12:00h to 16:00h with the full team (Artist and Programmer).
* The meeting will taking place in the SAE Room 4.
* Julian and Daniel will additional meet on each monday and sunday.
* The maximum time limit for a team meeting is 4 hours per meeting.

**Hours Worked per Week**

* For Julian and Daniel the work per week is set to 15-20h.
* For the artist, it is free to work as much as they want.

**Code Review Process**

* We will try to get at least one code review per month

**When Things Go Wrong**

* If we do not have a prototyp of the Game in the first 2-3 weeks that is enjoyable to play, we know that we have an emergency, and that we have to reconsider what to do.
* If an emergency appear, we would communicate via. whatsapp and meet at the SAE.
* If the SAE is closed, (like in the hoolidays) we will meet at Julian.

**Decision-Making Process**

* All important desicions about game design, technical design, and implementation will be done by Julian and Daniel.
* Julian will create a protocol and share the result to the rest of the Team.
* There will be a time limit depending on the problem.

**Rules of Conduct**

* What behavioral standards are expected of each team member during team meetings, work sessions, etc.?
* What process is used if any standards are not met by any team member?

**Team Roles**

Administrative Roles

* The Administrative Role will be done by Julian
* For example writing this Game Design Document or get in touch for another code review

Technical Roles

* The Technical Role will be done by Daniel
* For example to implement the results of the Artists.

**Executive Summary**

**High Concept**

The high concept is one sentence describing the game idea. This sentence is usually the marketing hook, used to push the game in print ads, websites, TV, etc. Make this your “tag line,” the sentence that **grabs you** (gets the attention of executives and perspective consumers).

**Locale**

Describe where your game takes place. This should include information about the physical location and time period. Use a few sentences here to describe your game setting to the reader. You can further define your game world/level in the Level/Maps section, within the Treatment.

**Genre**

Define the genre and theme of the game. If your game exhibits elements from multiple genres, include that information here.

**Basic Controls**

Describe what the player will control (in-game), what means of the control the player will use, and what camera perspectives are available to the user. This section is best utilized with brief descriptions of control object types and camera perspectives, followed by a complete default action map (formatted into a table).

**Game Goal**

What is the goal of the game? What is the player expected to achieve? What does the player do in-game to advance? Describe all aspects of advancement achievable during the game.

**Target Platform**

Describe the target platform. Include operating system and minimum system requirements. If you intend of developing for more than one platform, detail each platform in a prioritized list.

**Target Audience**

Describe the typical player. Include information about common interests (TV shows, books, magazines, movies, etc.) This information provides a base market and avenue for advertising. Provide a narrow age range, gender, and other classifications. The demographical information provided should include explanations of why this game will appeal to your target market.

**Front End Flow Chart**

Insert a flow chart visually representing the game progression from the start of the application to the beginning of the game. The flowchart should include GRC requirements, menu options, transitions, etc.

**Game Walkthrough**

Give a rundown of a typical play session. The idea is to express how your game will play and provide the reader with a clear view of what to expect in-game. It is effective to use 2nd person perspective within this section. Make this exciting to read and show us what makes your game fun, as well as detailing what we can do.

**Game Flow Chart**

This is essentially a visual representation of your game walkthrough. Chart the progression of your gameplay and include divergent paths and paths looping back to previous junctures, or detailed actions sets (what the player can do in-game and when the action is made available).

**Key Features**

* List of features that identify what makes your game unique, interesting, fun, worth buying, etc. This list can be used by the marketing department to sell your game to consumers and/or printed onto the game box.
* Include creative design elements, creative technologies, enhancements, etc.
* This section can be broken down into the following sections: General Features, Multiplayer Features, Player Upgrades, and Gameplay Features.

General Features

TBD

Multiplayer Features

TBD

Player Upgrades

TBD

Gameplay

TBD

**Comparative Products**

List comparable games and game play elements. Try to match, as closely as possible, games that directly compete for your target market. If your game is intended for budget gamers, you should list comparable budget titles.

**How this Product Stacks up**

Detail the similarities (gameplay, technology, etc.) between your game and the comparable products. Compare your game and its features, including information about your improvements and additions.

**Follow-up Products**

What products do you intend to accompany/follow this game. Include sequels, supplementary applications, shelf goods, licensed (including internal) technology.

**Treatment**

**Dust Jacket Story**

This is what appears on the back of your game box. This is what the consumer will read before purchasing your game. Keep in mind this story must be compelling and descriptive, yet easily fit onto the game box with screenshots and the like.

**Game Story**

This is your entire game story, told in enough detail to understand its full impact on the design of the game. This section should provide a clear vision for the game and its theme, while maintaining consistency with the game design.

**Characters**

Name/ID

This is the name or ID of the character. Each character in the game, both player and non-player characters, should be detailed in its own section.

Brief Description

Describe the character in enough detail to relate style and attitude, to help the art team create needed assets. This information should define the character in such a way as to allow modelers, animators, musicians, sFX artists, etc. enough detail to uniformly create the required assets in a consistent theme.

Visual Design

Describe, in full, the character visually. This should include any sketches or example art, as well as visually distinct attributes.

Back Story

Describe the character’s back-story in enough detail to understand its place within the game and its impact on the game’s design.

Attributes

Insert brief sections describing each attribute and a table numerically detailing all character attributes. These attributes should fully define a character (think gameplay and members) and how it will interact with your world. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Behaviors

Insert brief section describing each behavior and a table numerically detailing all behaviors. These behaviors should fully define character actions/interactions (think gameplay and methods) with your world and world objects. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Dialogue

Include all required voice recordings for this character. This includes both dialog and special effect (such as grunts, getting hurt, taunting, etc.).

**Weapons**

Name/ID

This is the name or ID of the weapon. Every weapon used (by player and non-player characters) in the game should be detailed in this section.

Brief Description

Describe the weapon and its function within the game. This should include what it looks like, how it operates, and what impact it has on a character. This information should define the weapon in such a way as to allow modelers, animators, musicians, sFX artists, etc. enough detail to uniformly create the required assets in a consistent theme.

Visual Design

Describe, in full, the weapon visually. This should include any sketches or example art, as well as visually distinct attributes.

Attributes

Insert brief sections describing each attribute and a table numerically detailing all weapon attributes. These attributes should fully define the weapon (think gameplay and members) and how it will interact with your world. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Behaviors

Insert brief section describing each behavior and a table numerically detailing all behaviors. These behaviors should fully define weapon actions/interactions (think gameplay and methods) with your world and world objects. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Rules

Detail the rules governing the weapon and its usage. These rules should clearly define the conditions under which the weapon operates and interacts with the world and world objects (including PCs, NPCs, vehicles, etc.).

**Power-ups**

Name/ID

This is the name or ID of the power-up. Every power-up used (by player and non-player characters) in the game should be detailed in this section.

Brief Description

Describe the power-up and its function within the game. This should include what it looks like, how it operates, and what impact it has on a character. This information should define the power-up in such a way as to allow modelers, animators, musicians, sFX artists, etc. enough detail to uniformly create the required assets in a consistent theme.

Visual Design

Describe, in full, the power-up visually. This should include any sketches or example art, as well as visually distinct attributes.

Attributes

Insert brief sections describing each attribute and a table numerically detailing all power-up attributes. These attributes should fully define the power-up (think gameplay and members) and how it will interact with your world. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Behaviors

Insert brief section describing each behavior and a table numerically detailing all behaviors. These behaviors should fully define power-up actions/interactions (think gameplay and methods) with your world and world objects. You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Rules

Detail the rules governing the power-up and its usage. These rules should clearly define the conditions under which the power-up operates and interacts with the world and world objects (including PCs, NPCs, weapons, vehicles, etc.).

**Levels and Maps**

Name/ID

This is the name or ID of the level. Every level in the game should be detailed in this section.

Brief Description

Describe the level and its placement within the game. This should include what it looks like, difficulty level, and what impact it has on the game goals. This information should define the level in such a way as to allow modelers, animators, musicians, sFX artists, etc. enough detail to uniformly create the required assets in a consistent theme.

Back Story

Describe the level’s back-story in enough detail to understand its place within the game and its impact on the game’s design.

Goal

Fully define the goal of the level. The goal should be both achievable and challenging for the expected skill level (of the player). Include any special information about the main objective and accompanying numbers used to define the goal. Secondary objectives should be detailed in separate quest/mission section, to be inserted.

Visual Design

Describe, in full, the level visually. Detail all level objects including both static and dynamic objects to be used within the level. This should include any sketches or example art, as well as visually distinct attributes.

Level Travel

Describe how and at what rate both player and non-player characters travel throughout the level. This information should define the travel methods in such a way as to allow modelers, animators, musicians, sFX artists, etc. enough detail to uniformly create the required assets in a consistent theme.

Scale

Numerically define the scale of the level in relation to the world, characters, and level/asset creation tools (e.g. Maya).

Rules

Detail the rules governing the level and interactions taking place within. These rules should clearly define the conditions under which interactions take place (both player and non-player characters, level objects, and triggers).

Attributes

Insert brief sections describing each attribute and a table numerically detailing all level attributes. These attributes should fully define the level, its triggers, and points of interaction (think gameplay and members). You can fine-tune the numbers during implementation. The numbers are used as a starting point when you begin the coding phase.

Environmental Interactions

Environmental interactions are any points of interaction triggered by the player or non-player character. Insert brief section describing each environmental interaction. (For example, when a player is standing on a platform, it moves down at a rate of .02 m/s. When there is no player or non-player character on the platform, it moves up at a rate of .01 m/s. The platform can move no farther than 1.0 m below the visible screen and cannot move into or below other collision capable objects.)

Ambient Environmental Aspects

List the types of audio, level animations, sFX, particle effects, transitions, or random events that bring the level to life. Include information about what role they play within the level. This list will be used to partly define your asset list.

Time

Detail how long it will take to achieve goals within the level. This should include expected travel times (travel from one building to the next), battle times, triggered event times, transition times, etc. For each level, include an approximate completion time (how long does it take the average player to complete your level).

Objects

List the objects within the level. Include information about what role they play within the level. This list will be used to partly define your asset list.

Map

Insert a picture of the level. Include information about special areas, hidden triggered events, NPC placement/spawning, etc. The map should be detailed enough for a level designer to complete its creation. The map should be drawn using a uniform scale.

Level Walkthrough

Include a *bulleted/numbered* list of interactions on the level in chronological order (if possible). Plan how the player’s experience in the level will flow and record it in the list, e.g.:

* Enter the level
* Player will have full hitpoints and be carrying the gauss gun with full ammunition.
* Walk down the hall
* As the player walks down the hall, every 3 seconds there is a 10% chance that a spider will drop to the ground and engage the player in combat.
* The spider will drop between 2 and 5 meters of the player (evenly weighted integer chance) in the center of the hallway either directly down the hall from the player or back up the hall from the player.
* Get to the room
* Attack enemy
* Boss1 will be in the center of the room. He will detect the player on trigger when the player crosses the threshold of the room.
* Battle is unavoidable here. The door in the back will not open until the boss is dead.
* Ammo powerups are located in the NW and SE corners of the room (see legend). Health powerups are located in the SW and NE corners of the room.
* Exit the room
* Once the boss is defeated, the player can approach the door and press the *use* key to proceed to level 4.

**Combat System**

Define your combat system in this section. Include about:

* Collision System (Collision Volumes/Tests)
* Turn-based vs. Real-time
* Separate Battle Screens vs. In-game Battles
* Area of Effect Damage (How it is calculated)
* Locational Damage
* Combat Resolution
* How Entities Die
* Incapacitation
* Body Part Death and Effects
* Etc…
* Determining Collision (Hit) Priority
* Control Issues
* Etc…

Keep in mind that you will probably have to cover more than the bullet points above, as game combat tends to be a large portion of many games. Feel free to tailor this section towards your gameplay.

**Special Systems**

Any other special systems in your game should be designed here. Examples might include:

* Stealth systems
* Character Leveling systems
* Merchant/Vendor/Buying systems
* Upgrade systems for characters or units
* Research systems (like in a strategy game)
* Mini game systems
* Etc…

Again, the format is up to you as long as it makes sense and is readable and useable.

**Charts and Tables**

Your charts and tables should encompass the numerical portion of your game. When detailing your game objects (etc.), it is best to place numerical data (e.g. attributes) into an easy to use table. These number must be easily accessible to anyone reading the document.

**Interactivity**

**Goal**

Define the overall goal of the game. Clearly state how the player will achieve this goal and all actions needing to be completed. If you have sub-goals/mission, create individual sections within, and define those as well.

**Interface**

Include a brief description and explanation of your game interface. This should include information about its appearance and how to use it. Also, include a mock-up (picture) to help solidify the interface scale and placement.

**Control Scheme**

Include a list of all actions a player can take to interact with the game environment *and map them to keys, buttons and mouse/stick movement.*

**Player Experience**

Define what the player will experience while playing your game. List and describe all actions taken by the player and their effects on your game world/gameplay. Tie this section into the goal and interface. Keep this section concise.

**Interactive Rhythm**

Explain the sense of timing that the player should feel. How long does a typical play session last? How long does the entire game last? What maintains the replay value? Some things to think about are downtime vs. uptime, speed of gameplay, how are the interactive and non-interactive sections of the game broken up? Etc…

**How the Player Marks Progress**

Define how the player marks progress? Make sure to detail how the player will know they are advancing (or regressing) in your game. How will they know they are winning/doing well?

**Game Logic, Algorithms, and Rules**

**Interaction Component Matrix**

Include your Interaction Component Matrix (ICM) within the section. Format the ICM in a table. Your ICM should cover all dynamic and interactive objects (characters, triggers, collision volumes, power-ups, etc.). Using notes and/or multiple tables may help format the information in a more easily used manner.

**Key Game Algorithms**

This section should cover any gameplay algorithms required by the gameplay and game design. This includes, but is not limited to, object usage requirements, accuracy determination, deterministic AI (including fuzzy logic), etc. The algorithms listed in this section should directly relate to the game design and gameplay and should cover base technology only when directly dependent on the game design.

**Game Rules**

Any game rules not covered in previous sections should be enumerated here. Be sure to include information about gameplay impact and numerical data.

**Reference of Key Elements**

**Scoring**

Detail, via paragraph(s) and table, all of the elements and conditions that can create score increase and/or character advancement. Note if there are alternate scoring conditions or specialized scoring rules.

**Winning/Losing**

Detail what the player must do in order to complete any sub-goals/mission and main game goal. This should be a step-by-step detailing of actions needed to complete the game. This section should also include any scoring/advancement conditions needed to complete any given goal.

**Loading/Saving**

This section should cover how the player/game logic will perform saving and loading of the game. Ensure you clearly define how and when the player/game will have the option/ability to save their progress. Also explain how, when, and what will be loaded upon performing a saved game load (Does the player return to the beginning of the level, a check point, or last position within the game?).

**Transitions**

Describe the transition from one section to another. This includes, but is not limited to transitions between loading and saving, mission objectives screens, entering buildings, NPC interactions, level transitions, losing or winning the game, etc.

**Rewards**

Detail how you will reward the player throughout the game. This should include information about in-game, level completion, and game completion rewards.

**Art and Production Design**

**Art & Animation Style**

Describe the look and feel of the game. Include game theme definition and examples. The style definition should be in enough detail to completely visualize the game and its elements. If you have multiple themes throughout the game, review each themed section.

**Sound Effects Style**

Keep this section separate from the music section. The sound effects section needs to specify the precise style of the sound effects needed for the game. You should consider the game theme when detailing this section. For example: Should an explosion sound like it came from a battlefield or a cartoon?

**Music Style**

The music will help set the mood for the player. Fully express the feeling a player should experience while playing your game. Be sure to descriptions that are consistent with your theme. For example: Tactical Shooter Background music should have a face paced Techno feel. During combat, the music will change to a more heavy metal style of music and should increase adrenal output.

**Storyboards and Sample Art**

Include your game storyboards and sample art in this section. This section may be broken down further, to make it easier to use.