ASTRONAUT SURVIVOR

Game Design Document

# Overview

Address the questions people might initially have. After reading the overview, everyone should have a basic understanding of what the rest of the document is going to be about.

## Concept

1. Pitch the game in 300 characters.
2. What is the genre?

## Style

1. What is the visual style?
2. Is the game going to be 2D or 3D?
3. What is the game flow and feel like?

## Features

1. What is the main mechanic?
2. What is the theme?
3. How large is the scope?

## Targetting

1. What platforms will the game be released on?
2. Who are the target audience and why?
3. What are the game’s competitors and what advantages does the game have over them?

# Management

## Schedule

1. Planned release date?
2. Soft launch? Early access?
3. Milestones? Alpha? Beta? Vertical slice?
4. When should there be a playable version ready?
5. Length of sprints?
6. Special events? Conventions?

## Budget

1. Running expenses? Salaries? Rent? Internet? Software subscriptions?
2. Purchases? Hardware? Software? Licenses? Service fees? Rating fees (ESRB, PEGI…)?
3. Platform fees? (Steam, Play Store, console stores…)
4. Current funding?
5. Additional funding plan? Crowdfunding? Investors? Early access?
6. How many copies must be sold? (Considering platform fees, taxes, discounts...)
7. Monetisation model? Retail? Digital distribution? Subscription? Microtransactions? Advertisements?

## Management Tools

1. Scrum board? Trello? Linear? Jira? Post-its?
2. Documentation? Google docs? Document management?
3. Version control? Git? SVN? Perforce?

## Test Plan

1. What is the goal of testing?
2. At which points must the game be tested?
3. How to get different types of players to test the game?
4. Are there scheduled test sessions? When?
5. How to get objective feedback?
6. Soft launch? How to get sufficient data?

## Risk Analysis

Write down a list of risks (and what they affect and what to do if they occur), for example...

1. Running over budget?
2. Game-breaking bug that only occurs once a week?
3. Test group finds the game confusing?
4. Somebody steals the game idea and gets to the market first?
5. The game struggles to get any publicity?
6. Large portion of developers become unavailable for long periods of time?
7. Hardware failure?

## Marketing Plan

1. What are the primary avenues of marketing for the game?
2. Will you do everything or focus on getting maximum results with fewer methods?
3. Content strategy? Your approach, tools, format, and tone?
4. Social media marketing strategy? Twitter? YouTube? Reddit?
5. Press, YouTubers, streamers, bloggers?
6. Conventions/expos?
7. Advertisement strategy?
8. Trailer? Self-made or hire outside talent?
9. Official website? Presskit?
10. Mailing list?
11. Community building? Discord? Forums?
12. Giveaways?

## Localization Plan

1. Is there a possibility the game will be localized to other countries and languages?
2. How must this be taken into account during the development?
3. How will the game be localized?
4. How is the quality assured?
5. Are audio (e.g. dialogue) and art (e.g. logos) assets localized?

# Game World and Narrative

Describe the elements that might affect gameplay, art, writing, music, or any other aspect of the game project.

## Look and Feel

1. Where does the game take place? Earth? Space? Fantasy world?
2. Is it modern day? Future? Past?
3. Does something look or feel different from the real world?

## Locations and Structures

1. What locations does the player explore? How do they differ from each other?
2. Are different areas separated somehow?
3. Does the player have to interact with some type of social structure?

Describe the narrative timeline of your game. Outline the characters, the plot devices, the beginning, middle, and end of your story.

## Story and Plot

1. What is the backstory?
2. What are the plot elements?
3. Why is the story worth telling?
4. How does the game hook the player at the very beginning?
5. What ensures that the players want to see the end of the story?
6. How is the story conveyed? Gameplay? Dialogue? Cutscenes?
7. Is there something happening in the game world that affects the gameplay?

## Characters

1. Who are the central characters in your story? How are they relevant?
2. What are their back stories? Personalities? Look?
3. Do the characters have important abilities or statistics?
4. How is character agency prominent in the story?

# Art

Give an overview of the art style so that non-artists know what the expectation is. It’s a good idea to describe individual art assets and detailed guidelines in a separate document.

1. What is the general color policy for the game art?
2. How is the unity of art style preserved?
3. What limitations should be considered with the art assets?
4. Other general guidelines?

## Concept Art

Embed important parts of concept art to the document. Have artists create mock-ups or dig up some references from the Internet.

1. What is the overall look of the game? What will the finished product look like?
2. What do the characters look like? The environments? Design of items?

## Characters

1. General guidelines for character design?
2. Is the amount of details or colors limited?
3. How to ensure that the readability of characters is preserved on screen?
4. 2D? 3D? Frame animations? Spline animations?

## Environments

1. General style guidelines for different environments in the game?
2. How does the design reflect the narrative?
3. What types of feelings should different environments evoke? How is that achieved?

## Effects (GFX)

1. How is the lighting constructed? (May need its own section.)
2. What post processing will be utilized?
3. What events or actions require particle effects?

## User Interface

1. What is the art style of the menus?
2. Art style of head-up display?
3. Art style of pop-ups? Text? Effects?
4. Fonts used?

## Cut Scenes

1. What parts of the game flow include cut scenes? Beginning of levels? Game intro? When meeting new characters?
2. Style of cut scenes? Comic panels? Cartoons? Stills? Scripted in-game events? Fully rendered 3D?

# Mechanics

## Progression

1. What is the goal in your game?
2. What are the consequences of losing?
3. Does the game have replay value? How is that crafted?
4. What do the players do in the game?
5. What different ways of progression does the game offer?
6. When is the game saved? What parts of it are saved?

## Core Loop

1. After the game starts, what is the progression like?
2. E.g. player completes a level, gets some money, purchases gear, and heads for another level.
3. Are there other activities they can do or alternate paths to this loop?

## Challenge

1. What mechanics do the players have to learn in your game?
2. How do you make sure they don’t learn everything too quickly (and get bored)?
3. What elements do you introduce to keep the challenge fresh?
4. How is the difficulty curve balanced throughout the game experience?
5. At what pace and in which order are new challenges and elements introduced?
6. Puzzle design?

## Movement and Actions

1. In what different ways can the player move in the game?
2. Are there special moves or actions?
3. How does the player actively affect the gameplay?
4. Combat model?

## Screens

1. Intro screen? Main menu? Credits?
2. Character selection? Gameplay? Inventory? Codex?
3. What options does the Options menu include?
4. How does the multiplayer match making screen operate?

# Levels

Give an overview of the levels so that artists, programmers, and others know what the expectation is. It’s a good idea to detail individual levels in a separate document.

## Level Flow

1. Do levels have an introduction? Cutscenes?
2. How do you ensure that there’s variety throughout each level?
3. Do levels have outros? A flagpole? Animation?
4. Are there special encounters that happen in the levels?
5. Are the levels generated or hand-crafted?
6. How long is one level going to take to finish?

## Objectives

1. Can levels have different types of objectives?
2. What makes the objectives interesting for the player?
3. Are there sub-objectives? Can they be skipped?

## Obstacles

1. What type of obstacles does the player need to overcome in the levels?
2. How is the obstacle placement determined?

## Physics Items

1. Are there items or objects that can interact with physics?
2. E.g. can boxes be moved? Blown up?
3. Does a result of a physics simulation determine if the level can be completed?

## Level Design

1. Are there special requirements for the levels? Enemy placement? Time limit?
2. How are the levels crafted? Separate editor?
3. Level design pipeline? Are levels prototyped? What elements must be included?
4. What defines a great level?

# Objects

## Items

1. Is there equipment in the game?
2. Can items be purchased or sold?
3. Can the player spend real money in the game?

## Pick-ups

1. Are there pick-ups? Money? Health?
2. Are there power-ups?

## Vehicles

1. Are there vehicles in the game?
2. How is the movement limited?
3. How are the vehicles acquired?

## Economy

1. How is the price of everything in the game world determined?
2. How do you ensure the player doesn’t get too much money or items?
3. What is the endgame economy like?

# Non-Player Characters

## Enemies

1. Types of enemies and where they spawn?
2. Artificial intelligence and pathfinding?
3. Behavioral patterns or strategic decision-making?
4. Strategies for the players to defeat enemies?

## Friendly Characters

1. Types of friendly characters and where they spawn?
2. How do they help the player?
3. Interactions with the player?
4. Artificial intelligence and pathfinding?

# Interface

## Controls

1. What are the controls going to be like in the game?
2. Are there multiple different devices the game can be controlled with (keyboard, gamepad, VR, etc.)?
3. Initial plans for the control schemes?

|  |  |  |
| --- | --- | --- |
| **Action** | **Keyboard+Mouse** | **Gamepad** |
| Movement | W, A, S, D | Left analog stick |
| Jump | Spacebar | A |
|  |  |  |

## Visual System

1. Considerations for the rendering system? (E.g. Forward/Deferred? PBR?)
2. How does the in-game camera operate?
3. Lighting models? (Bloom, hdr, tone mapping?)

## Graphical User Interface

1. Describe the graphical user interface in all the different screens of the game.
2. Is there a head-up display (HUD) in your game?
3. Where are different GUI elements located and why? There is an optimal places for them so have good reasons.
4. How is information in the game conveyed via graphics? Is there, for example, a visual indication to being low on health?

## Dialogue

1. Is possible dialogue delivered via audio or text?
2. Are there subtitles?
3. What other text is required for sufficient game feedback?

## Audio

1. How is audio utilized in telling players what is happening?
2. What types of events require audio feedback?
3. What sounds have priority?
4. Are there notification sounds outside the gameplay or relating to technical events?

## Help System

1. Is there a help system in the game?
2. In-game wiki? Move lists? Tutorials?
3. What are the type of activities in your game that players might struggle with?

# Audio

## Sound Effects

1. General style of SFX? References to other games?
2. Priority of effects? What sounds are important in different situations?
3. How to limit the SFX so it doesn’t cause any physical unpleasantness?

## Music

1. Do different levels have different music or is there a playlist that’s rotated?
2. Does the game have dynamically changing music? How is that controlled?
3. Do menus and other screens outside the gameplay have music?
4. Music for cutscenes?

# Technical

## Target Hardware

1. Minimum requirements and how will it be tested?
2. Processor?
3. Video card?
4. Memory?
5. Operating System?
6. Peripherals? Special controllers? VR goggles?
7. Internet connection?

## Development Standards

1. Code guidelines?
2. Version control guidelines?
3. Procedure for updating assets?
4. Prototyping guidelines?

## Game Engine

1. What is the primary game engine for the project? Why?
2. Which versions are used and can they be updated during the project?
3. Backup game engine in case something can’t be done with the primary?

## Networking

1. How are online services handled? High score lists? Cloud saves?
2. How is online play implemented? P2P? Dedicated servers?
3. Procedures for minimizing cheating in an online environment?
4. How to minimize network traffic?
5. How does the multiplayer match making operate?