

Game Concept & Design Document Template

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1 Template Introduction

This document is based on the research done during an internship at Overloaded Pocket Media. The document itself has been updated several times based on new experiences and insight into game design. In this version it is my intention to describe a broader range of game than just mobile games, as well as provide a document for fellow students and game designers to use.

This document has been created with the intention of making a clear game design document. To do this the document has been divided into 3 different documents, the game concept document, game mechanics document and game tech document. This is done with the intention of making a modular document that can be updated and split into different versions easily.

Documents created with this game design template will focus upon creation of a well devised game. What this template does not do is predict the playability of the game and define a plan for the overall game development. It is therefore important to consider this is only one phase in the Game Development process. I recommend that any game design be tested with tangible means such as pencil and paper, cards, board, etc, before any major resources are allotted to it. It is also important to understand that this document will act as a starting point and can not replace hands on interactivity and game testing.

Much of the contents of the game design will be influenced by factors such as the game being licensed, the type of game and the game designer himself. In the end this template is to act as a guide to concise documentation allowing the designer to give more attention to creativity.

2 Concept Document

The concept document serves the purpose as a way to present a game concept.

A general overview of the game, with the idea anyone can read and understand what the game is like.

This part of the document is one that will change very little once the concept is accepted.

2.1 Title Page

Game Name, Game Logo, Game Catch Phrase, Document Type, Document Version.

These need to be clear so that when used as a document everyone immediately recognizes it.

2.2 Credit Page

This area should present information about the person who authored the document and for what company.

Example:

Document Purpose:

Document Version:

Working Title:

Game Concept:

Game Document Author:

2.3 Sign-Off

This section is here to confirm that each team leader has read through the design and agrees with the current game design.

Game Design Sign-off

CEO:

Lead Designer:

Lead Programmer:

2.4 Introduction

A short sentence or two about the game, its genre, player type, technical form, references and theme.

Everyone that reads this should be able to understand what the basic idea of this game is.

A new purpose for the introduction can also be the reason for the concept and history of the game the concept is based upon. Here is a short list of subjects to address in the introduction:

- Genre
- Player Type
- Game Play
- Technical Form
- History
- Reference
- Theme
- Design Intentions (original or cloned)

2.5 Game Analysis

This is a general overview of the game.

Game Description	
Genre:	<ul style="list-style-type: none"> • Describe the Genre • <i>Example:</i> <ul style="list-style-type: none"> ▪ Role-play ▪ Adventure ▪ Strategy ▪ Puzzle ▪ Simulator ▪ Construction & Management ▪ <i>More Examples: Appendix A</i>
Game Elements:	<ul style="list-style-type: none"> • Game elements are the basic activities the player will be doing for fun during the game. • <i>Example:</i> <ul style="list-style-type: none"> ▪ Shooting ▪ Collecting ▪ Chase ▪ Combat ▪ Dodging ▪ <i>More Examples: Appendix A</i>

Game Content:	<ul style="list-style-type: none"> • <i>Example:</i> <ul style="list-style-type: none"> ▪ Horror ▪ Thriller ▪ Humor ▪ Drama ▪ <i>More Examples: Appendix A</i>
Theme:	<ul style="list-style-type: none"> • <i>Example:</i> <ul style="list-style-type: none"> ▪ Western ▪ Sci-Fi ▪ Fantasy ▪ <i>More Examples: Appendix A</i>
Style:	<ul style="list-style-type: none"> • <i>Example:</i> <ul style="list-style-type: none"> ▪ Real ▪ Old School ▪ Manga ▪ <i>More Examples: Appendix A</i>
Game Sequence:	<ul style="list-style-type: none"> • <i>Example:</i> <ul style="list-style-type: none"> ▪ Linear- Storylines ▪ Hyper- Storylines that the player can influence ▪ Simulation
Player:	<ul style="list-style-type: none"> • The Number players that can play the game at once
Game Reference	
Game Taxonomy:	<ul style="list-style-type: none"> • Game Taxonomy is here as reminder what the design direction is. • Game Taxonomy is made up of Simulation, Game and Narrative based. These can further be divided into Chance, Simulation and Narrative. This is further determined being fiction or non-fiction. • <i>Example:</i> Xyanide is a Fictional Game/Narrative, while Sim City is a Non-Fictional Simulation/Game. • <i>More Examples: Appendix A</i>
Player Immersion:	<ul style="list-style-type: none"> • This is an attempt to understand what kind of enjoyment the player will receive from the game. • <i>Example:</i> <ul style="list-style-type: none"> ▪ Tactical ▪ Strategy ▪ Narrative ▪ Physical ▪ Emotional ▪ Mental
Reference:	<ul style="list-style-type: none"> • References can come from any where. • The idea is to describe your game's story, play and style with references. • Using can be have negative and positive affects

Game Technical	
Technical From:	<ul style="list-style-type: none"> Basically there is 2D graphics (Flat) and 3D graphics
View:	<ul style="list-style-type: none"> Camera view the player will experience the game from <i>More Examples: Appendix A</i>
Platform:	<ul style="list-style-type: none"> Java, C++,
Device:	<ul style="list-style-type: none"> PC, Mobile, Console
Game Sales	
Consumer Group:	<ul style="list-style-type: none"> This a good point to talk a person from marketing to get the demographics
Payment:	<ul style="list-style-type: none"> This a good point to talk a person from marketing
Estimated Price:	<ul style="list-style-type: none"> This a good point to talk a person from marketing
Device Support List	<ul style="list-style-type: none"> See Appendix A

2.6 Game Atmosphere

This is where it is best to have a mood board or a clear description of the game's style.

This is a good place to start interacting with a graphic designer.

- Atmosphere Mood Board
- Character/ Units Sketch & Description
- A Level(Locations) Sketch & Description
- Audio Description

2.7 Game Play

Using this outline to create a descriptive paragraph about how the game is played.

The idea is that you want the person imagine they are actually playing the game.

Do not use Generic names when writing about the game play.

Example: No one wants to here that enemy_1 will have more hit points than enemy_2. Instead we should talk about how the Lazarus Fighter has more armour than Apollo Fighter.

This outline will vary according to the type of game.

- Opening the game application
- Game Options
- Story Synopsis
- Modes
- Game Elements
- Game Levels
- Player's Controls
- Winning
- Losing
- End
- Why is all this fun?

2.8 Key Features

Key features are a list of game elements that are attractive to the player.

It is a good idea to talk about the key features with someone from marketing.

- Number of Levels
- Number of Enemies/ Characters (*Example: 12 characters or amount of enemies, end bosses*)
- Time of Game Play (*Example: 2 hours of fun*)
- Replay ability
- Audio Specifications
- Graphic Specifications
- Device Compatibility
- Number of Players
- Online Activities (high scores, etc.)
- Number/Type Modes

2.9 Selling Features

This is a list of features that could be potentially helpful to marketing.

If a game has any copy writable material, note it here. (Such as characters)

It is a good idea to talk about the key features with someone from marketing.

- Marketing Ideas
- Consumer Group
- Unique Features
- Merchandising

3 Design Document

This document describes how game objects behave, controlled and properties they have.

This documentation is primarily concerned with the game it's self.

This part of the document is meant to be modular. Meaning you could have several Game Mechanic documents attached to the Concept Document.

3.1 Design Version

A version can single out a certain series of devices that may have limitations, different OS or more advanced features.

A code convention for different versions would be advisable.

Example: Such as **J1.1**

(J): (JAVA) Developed for a particular Technology

(1.): Concept Update

(.1): Content Update

3.2 Design Guidelines

This is an important statement about any creative restrictions that need to be regarded and a general over all goal of the design.

3.3 Game Design Definitions

This is a section where the definition of the game play is established.

Definitions should include how a player wins, loses, passes levels and the main focus of the game play.

Issues that should be addressed here are:

- Menu
- Synopsis
- Game Play
- Player Control
- Game Over (Winning & Losing)

3.4 Game Matrix

This is a spreadsheet containing the generic names of the player and antagonistic elements and their game properties.

This should allow an easy cross reference for an elements in the game that a value.

Consult with the programmer about the properties a game object.

See Appendix B

3.5 Game Flow Chart

This is where a visual of how the different game elements and their properties interact.

Game Flow chart should represent Objects, Properties and Actions that are present in the game.

Flow chart objects, properties and actions should have a number reference to where they exist with in the game mechanics document.

See Appendix C

3.6 Player Elements

List all the elements that are directly related to or to the benefit of the player.

Devise two sets of names for player elements. One set is a generic name (or code) and the other is its game name.

Describe the terminology that you use to describe the player's properties.

This is a good place to interact with a graphic designer to get graphics to match to game names.

Graphics that will be seen during game play should be exhibited here.

Multi-player issues should also be mentioned here.

3.6.1 Player Definition

Make quick descriptions that define the player.

What are the default settings for the player at the beginning of the game or level.

A suggested list of player definitions:

- Actions: What can the player do?
- Information (Status): What information about the game is available for the player?
- Default Properties: How does the player begin the game?
- Winning: How can the player win?
- Loosing: How does the player lose?

3.6.2 Player Properties

Make a list that defines the properties that a player has.

Player properties can be affected by player's action or interaction with other game elements.

Define the properties and how they affect the player's current game.

A suggested list of player definitions:

- Health
- Weapons
- Actions
- Etc.

Each property should mention a feedback as a result of the property changing

3.6.3 Player Rewards (Power-ups & Pick-ups)

Make a list of all objects that affect the player in a positive way. (i.e. health replenished)

Define these objects by describing what affect they cause and how the player can use the object.

3.6.4 User Interface (UI)

This is where a description of the user's control of the game can be placed.

It is also recommended to think about which buttons on a device would be best suited for the game.

Consider what the worst layout is, then ask you self if your UI is it still playable?

A visual representation can be added, where we relate the physical controls to the actions in the game.

When designing the UI, make use of the expertise of someone from quality control.

3.6.5 Heads up Display (HUD)

This is where a description of any graphics that will represent information during game play should be described.

A visual representation (mock-up screenshot) here would be useful.

This is a good place to interact with a graphic designer.

3.6.6 Player View

A screen shot is very necessary here.

A definition of how the camera moves for the player.

A mock-up of an overview of the level relative to the screen size will help create a perspective of a levels size compared to what is actually seen.

3.7 Antagonistic Elements

This is where a list of antagonistic (enemies, opponent) objects should be listed with graphics and written description.

Describe the terminology that you used to describe antagonistic properties.

Devise two sets of names for player elements. One set is a generic name (or code) and the other is its game name.

This is a good place to interact with a graphic designer to get graphics to match to game names.

3.7.1 Antagonistic Definitions

This where a description of what makes a antagonistic element.

3.7.2 Antagonistic Properties

This is a list of properties that antagonistic elements have in common.

3.7.3 Antagonistic List

This is where a list of all the antagonistic elements goes.

3.7.4 Artificial Intelligence (AI)

This is where visuals and written description(s) of the antagonistic element's behaviors.

These should be labeled in such a way that they can be used in level design with out having to describe them again.

Devise generic names for repetitive behaviors.

This is how an AI action could be broken down:

- Normal State: What is the object doing if it has not come in contact with the player?
- Detection State: What does it take for this object to detect the player?
- Reaction State: What does the object do as an action after passing the reaction state?
- End State: What happens to the object after player has reacted correctly or incorrectly to object?

3.8 Global Game Elements

In this section it is important to describe the boundaries, neutral objects, camera views and scale of the world.

Neutral game world objects can be things like a static background, objects that do not interact with the player or antagonistic elements.

3.9 The Story

This is where the story can be described in detail.

A story board can be used to tie in graphics to the text.

This can later be used for splash screen concepts.

3.9.1 The Story Copy

A shorter version of the story (The in game version) should also be written here.

This is where the script for in game characters or story information during the cut scenes would be placed.

This category does not always pertain to the current Game Design.

Sketches that are used for the concept can go into this section as visual reference.

In the case of a brand, certain creative restrictions should be noted here.

This is a good place to interact with a graphic designer to get graphics to match to game names.

3.11 Level Design

This is where information pertaining to level design and visuals of the level design goes.

Level design can best be shown as a flow chart.

Use generic names to create level design.

3.11.1 Level Copy

This is where the script for in game characters or story information during the cut scenes would be placed.

3.12 Audio & Sound F/X

This is where game ambient and Sound F/X should be listed with generic names then described.

This section also includes deciding if you will use a device's vibration ring mode.

3.13 Game Architecture

This is best done by a flow chart to represent the overall game.

Number each screen.

- Title Screen
- Option Screens
- Game Modes
- End Screens

See Appendix D

3.13.1 Game Architecture Overview

The splash screens or video clip need to be in accordance to game story and style.

If cut scenes use video then story boards should be created.

This will need to be created with the graphic designer.

Menu should be designed with the most important options easily accessible.

Be aware how many clicks it takes to accomplish a task.

It would be wise to get together with someone from quality control and a programmer.

The Game Instructions should be written so that the player understands how to play the game.

Mock-ups should be made so that the programmers get the correct layout of the menu.

Mention and describe high score screen here as well.

3.13.2 Architecture Copy

All text fro the game can be complied here.

Review Game Architecture Overview

3.13.3 How to play Copy

This will be game copy.

Information for the player, clearly describing how to play the game.

4 Technical Document

The information concerning the technical aspects of the game should be placed here.

The technical document is best achieved with consensus from the people responsible for the Visual, Programming and Audio aspects.

This part of the document is meant to be modular. Meaning you could have several Game Technical documents attached to the Concept Document and Game Mechanic Document.

4.1 System Requirements

This is a list of system requirements that a device will have to meet to run the game.

This also represents the restrictions that may apply to the end product.

4.2 Visual Content

A list of technical requirements from those in concerned with the visual aspects of the game.

This is a section that will require extensive meetings with a graphic designer.

All objects should be listed with their generic names.

- General
 - File Size Restrictions
 - File Format Type
 - File Quality Type
 - Visual Scale
- Player Elements
 - Type of States (Default, Damage, Destroyed, ect.)
 - Amount Animation Frames
- Heads Up Display (HUD)
 - Type Icons
 - States
 - Font Type
- Antagonistic Elements
 - Type of States (Default, Damage, Destroyed, ect.)
 - Amount Animation Frames
- Global Elements
 - Background/Texture/Tiles
 - Font Type

4.3 Audio Content

It is very important to communicate with the audio designer before and while the audio content is being developed.

- General
 - File Size Restrictions
 - File Format Type
 - File Quality Type
- Player Elements
 - Type of Sound f/x
 - Device Vibration
- Antagonistic Elements
 - Type of Sound f/x
 - Device Vibration
- Global Elements
 - Ambient Music
- Splash Screens
 - Ambient Music
- Menus
 - Type of Sound f/x

4.4 Programming Content

Contents should be collaboration with the programmer.

The object here is to try to organize and modulate as much as possible.

- General
 - Requirements
 - File Size Restrictions
 - File Format Type
 - Specify Coding Conventions
 - Language/Device Restrictions
 - Screen Type (Small, Medium, Large)
- Player Elements
 - Type of Event
- Antagonistic Elements
 - Type Event
- Global Elements
 - Type of Event
- Splash Screens
 - Type of Event
- Menus
 - Type of Event
 - Type of Options

4.5 Code Structure

This is where an overview of how objects/functions/data interact, a list of what specified functions/routines do and a list of what order modules will be written.

4.6 Concerns and Alternatives

If there are concerns about something technical they should be stated here and what will be alternatives to the concern.

4.7 Resources

A list of applications and equipment, that is acceptable for use on development of this game.

This is mostly a legal issue that development members must be aware of.

4.8 Technical Matrix

The Matrix will be split into the different device series for each content category.

Technical Matrix includes the content lists of Audio, Visual and Programming.

5 Appendix A

In this appendix there are lists for a games Taxonomy, Genre, Elements, Contents, Theme and Style. These lists are far from complete but are useful for further examples.

5.1 Taxonomy

- Simulation
 - Story
 - Play
 - Chance
 - Fiction
 - Non Fiction
- Story
 - Simulation
 - Play
 - Chance
 - Fiction
 - Non Fiction
- Play
 - Story
 - Chance
 - Simulation
 - Fiction
 - Non Fiction

5.2 Genre

- Basic
 - Adventure
 - Arcade (any "twitch" element)
 - Construction & Management
 - Puzzle
 - Role-play
 - Simulator
 - Strategy
- More Specific
 - Abstract (i.e., Arkanoid)
 - Adventure
 - Arcade (very generalised category)
 - Beat-em-up
 - Flight Sim/Space Sim
 - FPS (first-person shooter)
 - MMOG(Massive Multi-player Online)
 - MMORPG (role playing game)
 - MMORTS (real time strategy)
 - MMOTBS (turn base strategy)
 - Platform
 - Puzzle
 - Racing
 - RPG (role-playing game)
 - RTS (real-time strategy)
 - Shoot-em-up (scrolling shooter)
 - TBS (turn based strategy)
 - Trading

5.3 Game Elements

- Alignment
- Catch
- Chase
- Collecting
- Combat
- Cooperation
- Dodging
- Escape
- Fighting
- Forbidden Act
- Hiding
- Jump
- Luck
- Maze
- Nursing
- Obstacles
- Puzzle
- React
- Resource Management
- Seeking
- Shooting
- Story Comprehension
- Target
- Trading
- Trivia
- Timing

5.4 Content

- Action
- Drama
- Erotic
- Horror
- Humor
- Pure Play
- Realism
- Thriller

5.5 Theme

- Abstract
- Crime
- Fantasy
- Noir
- Porn
- Sci-Fi
- Spy
- War
- Western

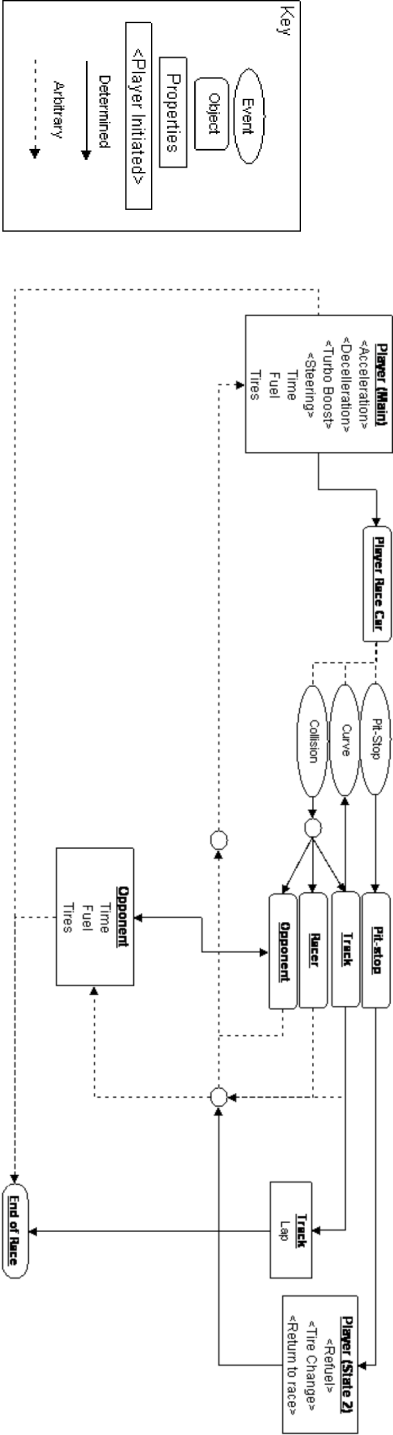
5.6 Style

- Abstract
- Cartoon
- Manga
- Old School
- Realism

6 Appendix B

Object <i>Unit type</i>	Properties			
	<i>Hit Points</i>	<i>Damage</i>	<i>Bullet speed</i>	<i>Movement</i>
<i>Basic Enemies</i>				
Cannon -01	30	100	Medium	NA
Cannon -02	60	150	Slow	NA
Static rocket launcher	70	700	Medium	NA
Flock 1	15	500	NA	Medium
Flock 2	15	35	Slow	Medium
Medium 1	80	350	Fast	Slow
Medium 2	90	400	Medium	Slow
Rail	120	600	NA	Slow
Small 1	25	200	Fast	Fast
Small 2	30	210	Fast	Fast

7 Appendix C



8 Appendix D

