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David and Donna Mower

Ocean Diver

Game Design Document

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# Game Design

## Summary

The main character is a scuba diver who wishes to search the oceans for different species of underwater life.

### Gameplay

The goal of the game is to explore different underwater environments to discover. The player must avoid dangerous obstacles such as unexploded mines, objects falling from above and dangerous aquatic life.

### Mind-set

Player needs to remain focused and alert to the dangers and wildlife around them, while diving through the level.

### Story

This game is about a scuba diver who wants to dive in different environments to see what underwater life each has to offer. The diver has been sent from a marine conservation group to document as much aquatic life as possible.

Towards the end of the game, the diver would have explored all the environments and have a catalogue containing full range of aquatic life and details about each species or object.

### Demo

The demo of the game will show the diver exploring part of the Coastal Dive level and some of the fish the game will have to offer.

# Technical

## Platform

Scuba Diver will be a cross-platform game supporting Microsoft Windows, Macintosh computers and Linux systems. The client’s computer would need Python installed to be able to play this game.

## Screens

Title Screen

1. Start New Game
2. Load Game
3. Save Game
4. How to Play
5. Options
6. Quit
7. Credits

Map Select

1. Coastal Dive
2. Coral Reef Dive
3. Wreck Dive
4. Cave Dive
5. Lake Dive

Controls in-menus

1. Keyboard to navigate the menu
2. Gaming Pad as an alternative to navigate the menu
3. Mouse as another alternative to navigate the menu

Controls in-game

1. Keyboard to control the Scuba Divers movement.
2. Gamin Pad as an alternative to control the Scuba Divers movement.

Mechanics

The diver has a movement speed, ranging from stopped (not moving) to swimming at full speed. The diver touches objects to interact with them. Creatures can be catalogued by being touched and the interact key being pressed. The diver cannot swim though the aquatic life or some objects within the different dive sites themselves. Colliding with these objects will cause the diver to stop. The diver has a health bar, that if reaches zero, the diver will have to start the level again.

# Level Design

## Themes

### Coastal Dive

* Based on Egypt’s Red Sea
* Choppy

### Coral Reef Dive

* Based on Australia’s Great Barrier Reef
* Bright
* Colourful them from the Corals

### Wreck Dive

* Based around a World War 2 sunken war ship
* Dark
* Unexploded mines and other objects scattered around the sunk war ship

### Cave Dive

* Based on a south American underwater cave
* Dark
* Objects falling around the diver occasionally
* Dangerous
* Narrow pathways

### Lake Dive

* Based on a Mangrove forest
* Murky water
* Lots of plants

### Basic object levels

Every level contains:

* Aquatic Life
* Collectable items
* Hazards

# Game Flow

The user launches the game. The first screen will be the main menu. In the main menu there is a set of options including Start New Game, options and quit for example. Once a game has been started, it can be paused at any time and the main menu will be displayed. The level selector will be displayed first, showing a map where different levels can be selected (in any order of completion).

Each level will have unique designs along with different underwater life selected specifically for that area. These will include freshwater for River or Lake dives and marine life so ocean dives such as reef or coastal dives. Some levels will include more dangers, such as wrecks and larger aquatic life such as sharks. The player will have a diver’s log when you can log each piece of wildlife or object discovered and keep track by viewing this log at any time.

Once you start a new level, you will see the diver either next to the dive boast or at the coast where they entered the ocean. The diver can the decent to begin their dive. You control the diver, trying to avoid different harmful objects or creatures to discover the fish they wish to document. The game will indicate when danger appears by presenting a warning sign whenever a hazard or potentially dangerous creature is near the diver. If the player gets hit or attacked then the divers health will drop and if the players health is depleted, the player has to restart the level.

# Graphics

## Style Attributes

# Asset List

## 2D Sprites

### Organics Sprites

### Static Sprites

### Dynamic Sprites

### Collectibles

# Sound / Music

## Style Attributes

* Coastal Dive
* Coral Reef Dive
* Wreck Dive
* Cave Dive
* Lake Dive

## Music

* Main menu will have background music of ocean waves crashing.
* Each level will have its own background music, with the rhythm based on the amount of danger that level could present.

## Sound Effects

Scuba Diver Sounds

* Bubbles breathing
* Taken damage / pain