# 1. Introduction

LifDoff is a turn-based strategy game in which both players select moves simultaneously. The game puts two players against each other as they maneuver underwater ships to destroy oncoming enemies and collect resources, winning when the other player's ships have been destroyed.

## 1.1 Purpose

This Software Requirements Specification (SRS) is a description of all functions and specifications of LifDoff. It gives a comprehensive look at all aspects of the game. This document is based on the IEEE 830 Standard.

## 1.2 Scope

This project has two main components: *Clients* and the *Server*. The *Server* exists on one machine only. Its task is to do all game computations. *Clients* are the individual instances of the game - one for each player. The *Client* relays information to the *Server*, which performs calculations and sends information back to the *Client.* The *Player* makes decisions and actions, inputs these into the *Client*, which then sends this information to the *Server*. This means there are two types of interactions: *Player-Client*  where the user is inputting commands to the game, and *Client-Server*, where the local game is sending or receiving information from the hosted *Server*.

## 1.3 Definitions, acronyms, abbreviations

### 1.3.1 Definitions

* **Client:** The local instance of the game GUI on a player's machine.
* **Server:** The unique hosted game to which other clients connect.
* **Player:** The user playing the game using the client GUI.
* **Host:** The player who is running the server in addition to running their client.
* **Action:**  A command that players can choose to issue during their turn.

### 1.3.2 Acronyms

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| **Acronym** | **Definition** |
| AI | Artificial Intelligence |
| (G)UI | (Graphical) User Interface |
| IEEE | Institute of Electrical and Electronics Engineers |
| LAN | Local Area Network |
| SRS | Software Requirements Specification |
| TCP | Transfer Control Protocol |
| UML | Unified Modeling Language |

## 1.4 References

* IEEE Recommended Practice for Software Requirements Specifications. New York: Institute of Electrical and Electronics Engineers, 1998.

## 1.5 Overview

Chapter 2 provides a description of the game itself, with textual explanations of the possible interactions a player can have with the game, such as actions, victory conditions, and basic gameplay. Chapter 3 contains diagrams that follow UML 2.0 specifications to detail all processes explained in Chapter 2.