1. MerWar
   1. Developed by SPARKLECATS
2. Project Overview
   1. Team Personnel
      1. Design Lead, Level Designer, Art Lead: Tanya Presnetsova
      2. Programming Team
         1. Programming Leads: Dale Gartman, Randy Hanak
         2. Additional Programmers: Tanya Presnetsova
      3. QA Team: Randy Hanak, Tanya Presnetsova
   2. Executive Summary
      1. High Concept: MerWar is a hack and slash side-scroller about Lorelei, a mermaid fighting her way through an ocean landscape to get reinforcements in a war. The ocean has three different “depths” which correspond to three different difficulty settings. The ocean nearest the surface is easy mode, the ocean underneath that is normal mode, and the bottom of the ocean is hard mode. The player can change depth at any time. The game keeps track of how much time is spent at each depth. The more time the player spends in hard mode, the higher the player’s score, and the more time is spent in easy mode, the lower the player’s score. The player is therefore driven to try out the depths in order to get a higher score. In later levels, if the player has been getting high enough scores in previous levels, the ocean gets deeper, adding on a very hard mode.
      2. Story Synopsis and Setting: An outpost of Poseidon’s kingdom has been attacked and overwhelmed by the forces of Oceanus. Lorelei, a mermaid that witnessed the massacre must swim back to Poseidon’s kingdom to warn him of the coming threat.
      3. MerWar is a 2D game developed in Pygame. In its current state, it has one level.
   3. Core Gamplay
      1. The player must navigate Lorelei through the enemies to the end of the game. Lorelei can dodge and attack enemies, switch between difficulties at any time, and can pick up powerups to boost her health if she’s missing any.
   4. Game Feature
      1. Gameplay innovations: The key game feature of MerWar is the ability to switch difficulties at any time. If the player is having trouble beating the game on any single difficulty, he or she can direct Lorelei to an easier depth. However, this will result in a lower score. If the player wants more of a challenge or acquire achievements, he or she can direct Lorelei to a lower depth, where the game will award more points.
   5. Project Scope: The current state of the game has one location it its single level: the open ocean. There are three different kinds of enemies, and one type of power-up.
   6. Target Audience: The target audience is 18-24 year old adults that enjoy challenging games.
   7. Delivery Platforms: This game is currently only being developed for play on Windows and Macs.
3. Section II: Story, Setting, and Character
   1. Story
      1. Back story: An outpost of Poseidon’s kingdom has been attacked and overwhelmed by the forces of Oceanus, ruler of Atlantis. Lorelei, a mermaid that witnessed the massacre must swim back to Poseidon’s kingdom to warn him of the coming threat. However, Oceanus’s Atlantean forces have already moved into the waters past the outpost and will do anything to stop her in her tracks in order to ensure their element of surprise when they fall upon Poseidon’s keep in the heart of the Mediterranean.
      2. In-game story: Lorelei swims through the ocean, cutting down all Atlanteans in her path, and delivers warning of the coming attack.
   2. Environments
      1. Open ocean:
         1. The open ocean is an environment where nothing but enemies impedes Lorelei’s progress. There are some peaceful fishes swimming around, but they do not interact with our heroine in any way. The open ocean is three difficulties deep, and has glowing starfish milling about that Lorelei can use to heal herself.
   3. Characters
      1. Lorelei
         1. Lorelei is a proud mermaid that doesn’t put up with nonsense from any seacreature. She’s extremely loyal to Lord Poseidon as she had grown up in his keep and has seen firsthand how gentle and kind the notoriously grumpy god can be when he isn’t squabbling with his brothers. She one day aspires to be the General of Poseidon’s army in the western Mediterranean Sea, and has so far achieved Lieutenant. Her past-times include playing tag with the Blacktips and terrorizing passing human vessels.
         2. Lorelei looks like you typical Mediterranean mermaid. She has olive colored skin and dark hair. Her tail is a cherry shade of red, and she has bright green bioluminescent algae living attached to her tail fin, as is common for mermaids who spend a lot of time in the darker and more dangerous areas of the sea.
         3. Lorelei carries a halberd that she uses for both slashing and stabbing attacks.
      2. Bad Guys
         1. Grunts: There are three types of enemies barring Lorelei’s path to Poseidon’s keep. The Atlantean Sharkmaids are the most basic enemy type with the lowest attack strength (probably because they inherited the wrong end of the shark), the Atlantean Squidmen are slightly more powerful because of the amazing strength of their tentacles, but move around much slower than the Sharkmaids do (shark tails are useful for something, after all).
4. Section III: Combat
   1. Weapons
      1. Weapon #1
         1. General description and most effective use
         2. When it is first acquired
         3. Art
         4. Statistics (for both primary and secondary fire)
            1. Type of ammunition
            2. Shots per clip
            3. Fire rate
            4. Reload rate
            5. Damage inflicted
            6. Range
   2. Powerups
      1. Powerup #1
         1. Brief physical description of how the object is represented in the world
         2. When it is first acquired
         3. Art
         4. What it does
         5. Statistics
            1. Effects
            2. Duration
      2. Powerup #2
      3. Etc.
   3. Melee (hand-to-hand) combat
      1. Attacks
      2. Defensive moves
      3. Combos
5. Section IV: Controls
   1. PC Keyboard/Mouse Commands
      1. Default keys for movement controls
         1. Move forward
         2. Move backward
         3. Strafe left
         4. Strafe right
         5. Jump
         6. Etc.
      2. Default keys for using weapons
         1. Primary fire
         2. Alt-fire
         3. Reload
         4. Previous weapon
         5. Next weapon
         6. Etc.
      3. Inventory access and manipulation
      4. Menu access
   2. Console Platform #1
      1. A picture of the controller explaining what each button does
      2. Movement controls
      3. Weapon controls
      4. Action controls
      5. Combos
      6. Force-feedback options
6. Section V: Interface
   1. The Camera
      1. Standard view
   2. HUD
      1. Worldview
      2. Status information
         1. Health
         2. Energy
         3. Armor
         4. Weapon equipped
         5. Ammo remaining
         6. Mission objectives?
   3. Menus
      1. Game screen flow diagrams (schematic of how all the game’s various screens are accessed)
      2. Main Menu
         1. Single-player
            1. Load game
            2. Save game
            3. Play training level
            4. Set difficulty level
      3. Inventory Menu
      4. Credits
7. Section VI: Artificial Intelligence
   1. NPC #1
      1. Statistics
         1. Field of view
         2. Range of view
         3. Etc
      2. Internal states & the triggers that change them
         1. Idle
         2. Guarding an area
         3. Patrol
         4. Follow
         5. Search
         6. Etc.
      3. Movement
         1. Pathing
      4. Combat decisions
         1. Friend/foe recognition
         2. Targeting decisions
         3. Attack with ranged weapon
         4. Attack with melee weapon
         5. Take cover
         6. Team-based decisions
         7. Etc.
8. Section VII: Detailed Level/Mission Descriptions
   1. Level #1
      1. Synopsis
      2. Introductory material (Cutscene? Mission briefing?)
      3. Mission objectives (player goals)
      4. Physical description
      5. Map
      6. Enemy types encountered in-level
      7. Weapons/powerups available
      8. Level walkthrough, including scripted sequences and non-interactive scenes. This should also include any puzzles the player must solve, as well as the solutions to those puzzles
      9. Closing material (Cutscene? Debriefing? Statistics menu?)
9. Section IX: Scoring, Cheats, Easter Eggs, & Bonuses
   1. Score
      1. How score is tracked
      2. How score is communicated to the player
10. Section XI: Asset List
    1. Art
       1. Animation list
          1. Characters
             1. Character #1

Move #1

Move #2

Etc.

* + - * 1. Character #2
        2. Etc.
      1. Weapons
         1. Weapon #1

Firing animation

Reload animation

Projectile in flight animation

* + - 1. Destructible or animated objects in the world
         1. Object #1
         2. Object #2
         3. Etc.
    1. Effects list
       1. Weapon effects list
          1. Firing effects
          2. Hit effects
          3. Etc.
       2. Environmental effects
          1. Decals
          2. Smoke
          3. Sparks
          4. Fire
          5. Explosions
          6. Etc.
    2. Interface Art List
       1. Icons
       2. Buttons
       3. Menus
       4. Windows
       5. Etc.
  1. Sound
     1. Environmental Sounds
        1. Walking/running sounds on different surfaces
        2. Foley sounds of character actions within game
        3. Explosions
        4. Doors opening and closing
        5. Etc.
     2. Weapon Sounds
        1. Weapon #1
           1. Firing sounds
           2. Hit sound
           3. Reload sound
        2. Weapon #2
        3. Etc.
     3. Interface Sounds
        1. Various clicks, beeps, etc., as the player maneuvers through the menus
        2. Alert/acknowledgement sounds as the player picks up objects or his game state changes
  2. Music
     1. Ambient
        1. Loop #1 + duration
        2. Loop #2
        3. Etc.
     2. Action
        1. Loop #1 + duration
        2. Loop #2
        3. Etc.
     3. Victory loops
     4. Defeat Loops

1. Section XVI: References
   1. Games
   2. Movies
   3. Books
   4. Art