MARINE MANIA

SAIL, SHOOT, CONQUER

TEAM MEMBERS

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PRODUCT DESCRIPTION

- **Overview**:
    - Utilize strategy to survive as long as possible navigating and facing off various enemies in the sea

- **Features**:
    - Multiple enemies, Shield Feature, Leaderboard, Replay, Score/Level Functionality, Tutorial, Minigame, etc.

PRODUCT INTENDED USERS + VALUE

- **Intended Users**:
    - Video game enthusiast
    - Users looking for challenging game
    - People who want to have fun
- **Value**:
    - Fun gaming experience that enhances users strategic thinking skills

DEMO

https://ashtoncorsello.github.io/Marine-Mania/

TECHNOLOGIES USED

- GitHub
- Discord
- VSCode
- JavaScript (P5JS)
- HTML/CSS
- Piskel
- Firebase Realtime Database

PROCESS METHODOLOGIES USED

Agile Approach:

- Scrum Methodologies
  - Sprints, Artifacts, Code Reviews

TESTING AND VERIFICATION

- Behavioral Testing
  - We worked on implementing simple tests like finding elements on the main page.
- User Testing

```python
# Find the button element by its visible text using XPath
button_text = "Debug Room"  # Replace with the text on your button
debug_button = driver.find_element(By.XPATH, f"//*[text()='{button_text}']")
print(debug_button.text)

if debug_button:
    print(f"The '{button_text}' is present. TRUE!")
else:
    print(f"The '{button_text}' is not present. FALSE!")
#sleep(3)
#button.click()

# Execute Javascript Function
js_function = "GameOver();"
sleep(10)
driver.execute_script(js_function)
text_button = "Try Again?"
try_again_button = driver.find_element(By.XPATH, f"//*[text()='{text_button}']")

if try_again_button:
    print(f"The '{text_button}' is present. TRUE!")
else:
    print(f"The '{text_button}' is not present. FALSE!")
```

```
(base) terrelletettey@Terrelles-MBP Marine-Mania % /Users/terrelletettey/opt/anaconda3/bin/python /Users/
rrelletettey/Desktop/Marine-Mania/webTesting/app.py
Debug Room
The 'Debug Room' is present. TRUE!
The 'Try Again?' is present. TRUE!
(base) terrelletettey@Terrelles-MBP Marine-Mania % []
```

GRAPHIC DESIGN

- Retro pixelated style
    - Influenced by old school arcade games and consoles
    - Issues with icon scaling
- Lots of editing done using Piskel, an online pixel editor
- Main menu and game over created with Microsoft Paint
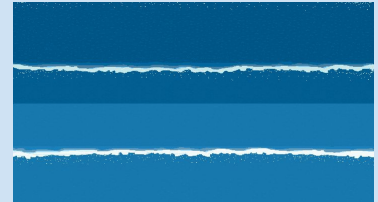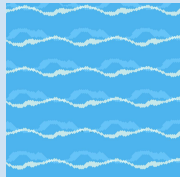
AUDIO DESIGN

- 25 audio files
    - 16 stored in 2 random arrays
- Made by SIDEARM studios.
- I own them for personal and commercial use.
- Recorded in their studios.
- Notable: Arrays store 'enemy die' sounds and 'shoot' sounds
    - Play random one each time
    - Method in place of pitch variation

TEST USER FEEDBACK

- Users didn't understand how to activate shield until told how to activate it.
- Users find the game fun but can be repetitive after a while.
- Users would like for there to be more to the game, power-ups, coins, shops, etc.

LEARNING TAKEAWAYS

- AGILE processes
- Utilization of GitHub
- JavaScript/P5JS
- Importance of collaboration and communication
- Benefits of Artifacts and Documentation
- Team Leadership
- Program Modeling

FUTURE WORK

- Continue to add level and enemy features
- Enhance visuals
- Better movement
- Balancing
- More interactive enemies
- Combo meter

QUESTIONS?

THANK YOU