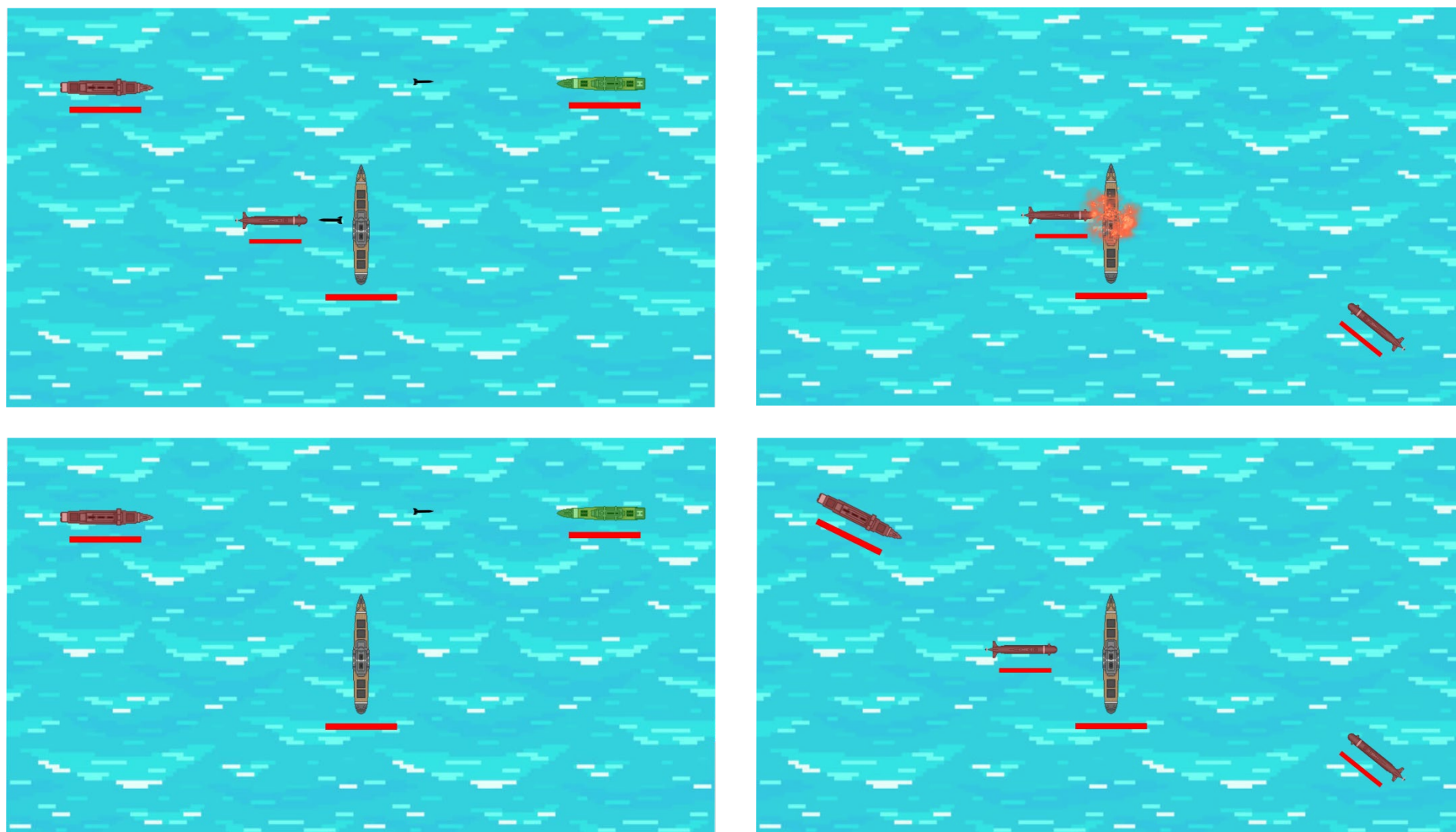


Design of SSVEP based BCI Game for Attention and Executive Function Training

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Game Concept Scenarios:



Project Objectives:

The aim of this project was to develop a novel SSVEP-based BCI game for attention and executive function training that is intuitively fun whilst also training the player's cognitive skillsets (namely Joint Attention, Spatial Awareness and Executive Function). Therefore, this study will investigate three key aspects:

1. How feasible it is to develop a BCI game with SSVEP that not only targets the average individual but for ASD individuals as well.
2. The classification accuracy (machine learning performance) of asynchronous SSVEP paradigm.
3. Training performance of the player on three areas: behavioural, physical, and cognitive.

The results gathered from these three points will help provide useful insights for researchers and game developers alike to consider when they design and develop future BCI games.