CS4530 Final Project: Dolphin Cove

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Our features: Watch Party, Calendar, Battleship

Dolphin Cove extends from the basic communication exchange platform of Stack Overflow codebase and **improve community interactions** via the implementation of Calendar, Battleship and Watch Party features.

New features enable users to schedule events related to the platform and battle against each other in a game of Battleship. For a more casual take, users can enjoy Youtube videos and message concurrently within the same Watch Party lobby.

Demo and Source

Top right: Battleship game page
Top left: Private Watch Party room
Bottom left: Sitewide Calendar

Deployment: https://dolphin-cove-project.onrender.com/
Codebase: https://github.com/neu-cs4530/spring25-team-project-spring25-project-group-207

Our Technology Stack & Design

Calendar visualization is implemented via react-big-calendar and react-markdown library. Date format is supported via moment library. Users can create events on a sitewide calendar which can be linked to question or watch party function supported by the site. Optional features include tags and visibility for the event.

Watch party is implemented via react-youtube which supports concurrent video streaming via Youtube API among various users on the same platform. Hosts can initiate voting sessions for rearranging queue where all participants can interact with. Watch rooms can be host privately and are accessible via room key.

Battleship is built on top of existing game page provided from Stack Overflow basecode. Users can participate in the 1v1 classic game with supported UI.

Future Work

Currently, the UI arrangements are made with fullscreen with a generic laptop aspect ratio in mind. Better dynamic components fitting should be implemented to support split screen and alternative screen ratios. Mobile view can be supported in the future for user usage on the go.

Event sharing has been restricted to public watch party/question due to complications with sharing and visualizing private events. Future support on this aspect would enhance usage of site functionalities.

Additional game features can be implemented to improve user experience. Spectator mode would allow more users to participate in the same game event besides the main two players. More games can further be hosted on the site to offer variabilities.