

# Island Rush: K3

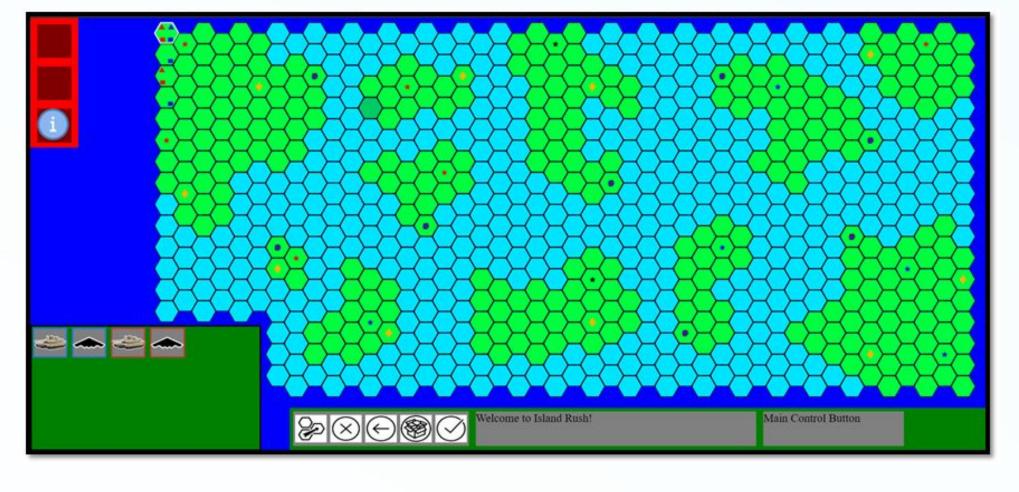
## A Military Strategy Teaching Game

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CSCE 606 Project Poster



#### Introduction

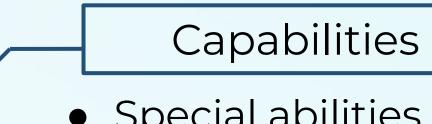
- Military Strategy **Teaching** Board
   Game for USAFA.
- Game is played through a web-app
- Consists of **two teams** of 4-5 students
- Objective: Teams make real-time
   actions to place and move units,
   battle the enemy, conquer island
   territories, and ultimately capture the
   opposing team's home island



## Design

#### Units

- Different types of Units:
   Air, Land, SOF, Maritime
- Different costs and abilities



- Special abilities
   commanders can
   purchase and use
- Different types: Cyber,
   Space, Nuclear,
   Unconventional

#### News Alert

- Provide info for in-game events
- Various levels of impact on in-game activities

#### Lessons Learned

- Better **documentation** in code for other developers to understand and take over
- 2. Better file **classification** for other developers to navigate code
- 3. Better documentation on the project itself for other non-coding people to understand the project

### Technologies Used

- Node.js
  - Frontend
  - Backend
- Redux
- React
- MySQL
- Azure
  - Production



### Challenges

Purchasing, Planning, Execution

Combat Arena

Land and water tiles

Hex grid layout

Island terrain

Round-based RNG battles

Units have strengths and

Real-time Actions

real-time actions

Async design allows for

Distinct phases: News Alert,

Battles

weaknesses

- Legacy code hard to understand.
   (Little Documentation and large code base)
- 2. Not everyone is familiar with Javascript(Node, React, Redux) or SQL

#### Solutions

- 1. Watch Youtube tutorial videos on the things we are working on
- 2. Project owner walks through the code and explain it very detailed to all of the developers

#### Results & Conclusions

We made the game work and met requirements of our customers, although there are still more features that need to be done. We did a lot of work on documenting the whole project(including non-coding part) so that the contractors that our customers hire would have a better understanding of the whole game and the code base.