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A learning game for SDG 14
MVP 2

Mason Lane
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SDG 14

- “Conserve and sustainably use the oceans”



Vision

- A learning platform that holds user's attention with a fun and interesting game(s).
- Encourage daily visits, which will provide more learning opportunities.
- Produce interesting trivia or direct to advanced resources, charities and activities.
- Browser game, reaching mobile and personal computer devices in the classroom



Status: Yellow - Successes

- Working popup overlay for trivia and quota
- Successfully reading trivia
- Performance improvements
- May have a way to create unique mouse pointer



Status: Yellow - Shortcomings

- No side-panes
- Cannot pan camera
- Persisting performance issues



Next MVP

- Introduce websockets and database for multiplayer (tracking objects on the backend, instead of with mocks)
- Investigate ways to improve performance
- Add custom mouse pointer (given time)(likely no time)
- Introduce ip tracking for score-keeping and quota keeping (given time)(likely no time)



Changes

- Aforementioned time constraints may bar me from including IP tracking for a player's unique score/turn timer. Perhaps cookies would offer a faster solution - though one that is easily bypassed.





Concerns

- Performance issues will likely grow with the inclusion of websockets or handshake.
- No camera panning
- Time constraints have left little time for the backend
- First time working with websockets - learning hurdles expected
- May need to cut IP feature and mouse cursor changes



Reflection

- I feel less than on-track, but within expected margins. I voiced my anxieties about this mvp in previous communication. Luckily, I got a lot of the work done in mvp1 to offload some of the expectations in mvp2.
- Reading json for the popup was an exceptionally difficult task. I learned a lot about how to handle future<type> properties. I also recovered 10fps on average with my recent performance fix
- Given my inexperience, I am anxious about the game's performance. I have a fairly good PC for development, so I need to test this application on weaker machines.
- Resources on websockets, tutorials - especially ones that involve Flame, Flutter or just the language Dart would be useful I imagine.



Thank You