

UNO

Card Game by Team F

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1. What was difficult and why?

- Faced problems in database migrations facing problem in implementation and version control
- Found difficulties in tracking which backend routes trigger specific frontend renders
- Problems in websockets implementation, specially in synchronous state updates across clients
- Handling various game states and player interaction updates in game logic proved to be difficult
- Error handling issues and resolving various small reference errors
- Non-responsiveness of a team member added complexity to project management and task distribution



2. The main problems we encountered?

- Faced problem with the first database schema so had to redesign the schema to meet our requirements
- Adapting DB queries to work with our game model
- Reverting back to old login from passport for authorization due to information not being saved in the database
- Faced a steep learning curve with new technologies and frameworks.
- Managing multiple branches



3. What did we learn?

About front-end

- Improved User Interface design process and implementation of HTML, CSS flex & grid
- Learned dynamic rendering and stateless frontend operations.
- Learned about debugging issues related to data not being rendered correctly on front end

About database

- Understood the differences between PostgreSQL and MySQL
- How SQL works in comparison to MongoDB
- Learned how to interpret and debug SQL Queries
- Learned database connection methods, including .env URL and object methods

About backend

- Focused on managing game sessions to ensure consistent game state
- Learned to create complex game logic and specific routes for event handling
- Gained experience in WebSocket implementation for real-time client-server communication

General

- Improved skills in using JavaScript debugger for step-by-step problem-solving
- Enhanced error handling capabilities for efficient exception management
- Successfully collaborated to prioritize and execute main tasks despite the challenge of tasks distribution throughout team.



4. What features we implemented ?

- Game Logic
- Real-time Chat
- User Signup and Login
- Real-time Updates with WebSockets
- Dynamic Data Rendering on Frontend
- Session Management
- Responsive User Interface
- Database Integration and Management
- Error Handling and Validation
- Interactive Game Interface
- Game State Persistence



5. Demo

Thank you for watching !!

