BUFFONOMICS

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Buffonomics Vision

1. Monitor the stock trading activity of members of Congress.
2. Provide transparent insight into political finance for all investors.
3. Visualize governmental financial behavior to facilitate comprehension.
4. Identify unusual trading activity potentially correlated with legislative actions.

Tools

- GitHub - 5 stars
- Docker - 5 stars
- Node.js - 5 stars
- PostgreSQL - 5 stars
- HTML - 5 stars
- CSS - 5 stars
- Javascript - 5 stars
- VSCode - 5 stars
- Postman - 4 stars
- Render - 3 stars

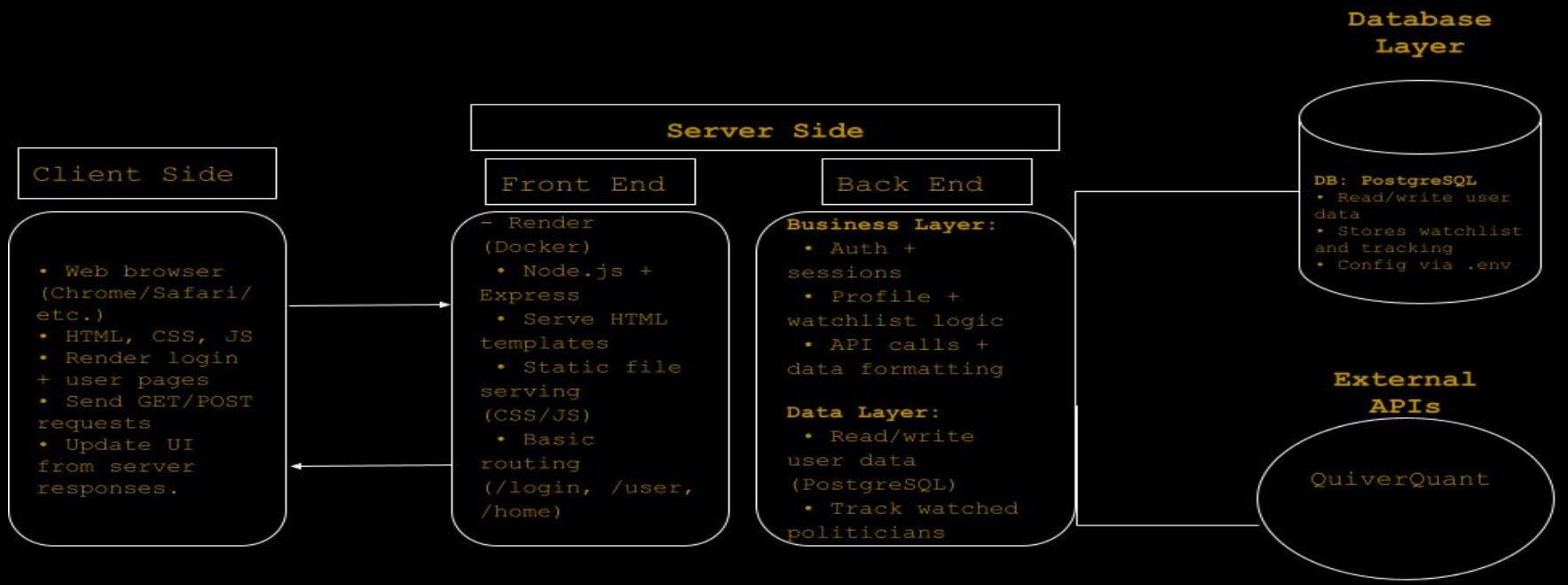
Methodologies

- Agile - 5 stars
- Peer Code Reviews - 4 stars
- Task delegation - 5 stars

3rd Party service

- QuiverQuant

Architecture



Project Challenges

- **Team Communication**
  - Struggled with effective and consistent communication
  - Switched to discord and communicated more often
- **Managing version control**
  - Merge conflicts slowed down development
  - Better communication to avoid conflicts, committing early and often
- **Scope/Time Constraints**
  - Had to prioritize key features

Technical and Data Challenges

- **API Pivot**
  - Initial API locked key data behind a paywall
  - Switched from Financial Modeling Prep to Quiver Quantitative API
- **API Endpoint Limitations**
  - Quiver’s endpoints provided limited data
  - Integrated fallback endpoints and cached data
- **Deploying on Render**
  - Backend worked on Docker but failed on Render
  - Mirrored the .env values in a Render environment group

Future Scope

- Add interactive analytics dashboard
- Email Notifications for users
- Machine learning to detect unusual activity
- Optimize homepage background performance
- Find data ourselves (NO API USE)

Enhancements

- Improve load times
- Strengthen error handling + input validation
- Enhance session security
- Expand watchlist beyond Congress members.

Demonstration

Thank You!

Q&A