

# Data Polish

## Final Presentation Group 1



### 01 The Product Vision

Data Polish: Streamlining the data preparation workflow

**What do we do?**

- Profile Data
- Analyse Data
- Clean Data

**Who do we do it for?**

- Primary User: Data Science Students
- Secondary User: Data Professionals

**Why do they need it?**

- Remove Technical Roadblocks
- Speed
- Concentrate on the important stuff

### 02 The Technical Stack

The technical stack diagram showing Frontend, Backend, and Cloud components.

- Frontend: React, Angular, Vue.js
- Backend: Python, Java, Node.js, MySQL, AWS Lambda
- Cloud: AWS, Azure, Google Cloud

### 03 The Key Technical Challenges

**Data Science Perspective**

- Accommodating unknown user data
- Order of Operations

**ASD Perspective**

- Accessible UI
- Integration
- Debugging cloud services



### 04 Evaluation the Detail

"I want to see this product in my work. It's quicker than zappin"

One of our users

Objective	Techniques	Results
- Is our product intuitive? - Is our product accessible? - Is our product more efficient than alternatives?	Software evaluation: <ul style="list-style-type: none"><li>Integration testing</li><li>Benchmark testing</li><li>User research<ul style="list-style-type: none"><li>Usability analysis</li><li>Usability walkthrough</li><li>Usability protocol</li><li>Observation</li></ul></li></ul> Expert Feedback: Accessibility evaluation	<ul style="list-style-type: none"><li>✓ User liked the dashboard.</li><li>✓ Our tool is highly accessible.</li><li>✓ Our tool is intuitive to use and performs benchmark tests.</li><li>✗ User did not like the lack of live interaction from data clearing.</li><li>✗ A slight learning curve is required.</li></ul>

### 05 The System Review

Did we solve the problem?

Outstanding Problems

- Intuitiveness of Clean Data Page
- Overall UI improvements
- Make it Open Source
- System Monitoring
- Use Reflection of Clean Data

Future Improvements

### 06 Conclusion

**Team Collaboration**

- Diversity was our strength
- Followed a scrum/agile methodology
- Constant Communication

**Project Takeaways**

- New Technologies
- How to work effectively in a team
- Places in software delivery

**Retrospective**

- More ASD
- Test early, Test often (TDD)
- Start with Linux Servers
- Beware of Scope Creep
- A lot more!



### 08 Q&A

Thank you,  
Any  
Questions?

# Fab 5



Umama

D22124465



Naveen

D22124491



Nikodem

C18415776



Oluwatobi

D22125039



Sean

D22124413



# The Product Vision

01

Data Polish: Streamlining the data preparation workflow

## What do we do?



- Profile Data

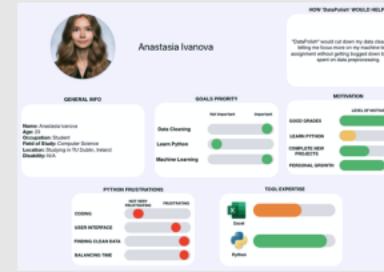


- Analyse Data



- Clean Data

## Who do we do it for?



**Primary User:** Data Science Students

**Secondary User:** Data Professionals

## Why do they need It?



- Remove Technical Roadblocks



- Speed



- Concentrate on the Important Stuff

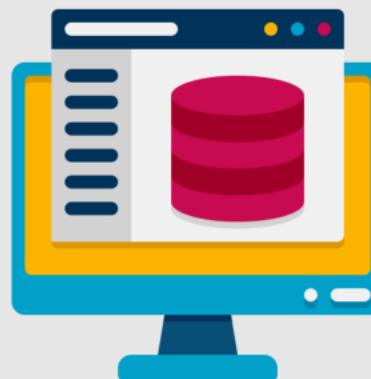


# The Technical Stack

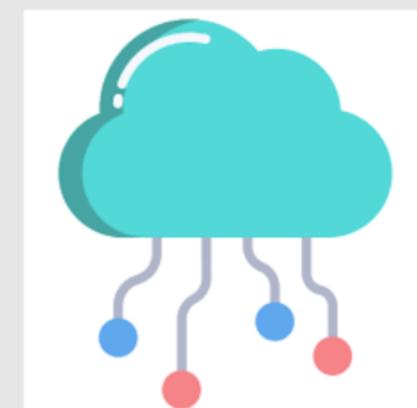
02



Frontend



Backend



Cloud





# The Key Technical Challenges

03



## Data Science Perspective

- Accommodating unknown user data
- Order of Operations

## ASD Perspective

- Accessible UI
- Integration
- Debugging cloud services

# Evaluation: A Journey



0

MVP



1

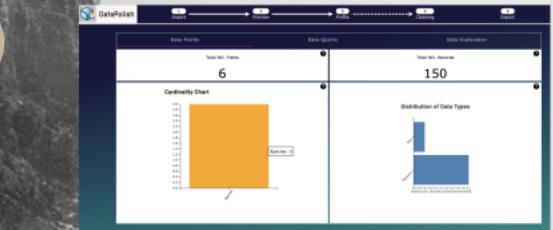
Beta



2



3





# Evaluation the Detail

04

"I want to use this product in my work, it's quicker than python"

One of our users

## Objective

- Is our product intuitive?
- Is our product accessible?
- Is our product more efficient than alternatives?

## Techniques

### Software evaluation:

- Unit testing
- Integration Testing
- Benchmark testing

### User evaluation:

- Cognitive walkthrough
- Think aloud protocol
- Questionnaire

### Expert Feedback

### Accessibility Evaluation

## Results

- ✓ User liked the dashboard.
- ✓ Our tool is highly accessible
- ✓ Our tool outperformed orange and python benchmark tests
- ✗ User did not like the lack of live interaction from data cleaning.
- ✗ A slight learning curve is required



# The System Review

05

## Did we solve the problem?



## Outstanding Problems



- Intuitiveness of Clean Data Page



- Overall UI Improvements



- System Monitoring

## Future Improvements



- Multiple Datasets



- Make it Open Source



- Live Reflection of Clean Data



# Conclusion

06

## Team Collaboration



- Diversity was our strength



- Followed a scrum agile methodology



- Constant Communication



## Project Takeaways



- New Technologies
- How to work effectively in a team



- Phases in software delivery

## Retrospective



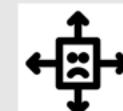
- More ASD



- Test early, Test often (TDD)



- Start with Linux Servers



- Beware of Scope Creep

• • •

- A lot more!



## Live Demo

07





Thank you,  
Any  
Questions?

