

NOVEMBER 19, 2021



Misinformation and Credible News Analysis Tools

Faculty Mentor:
Felicity Escarzaga

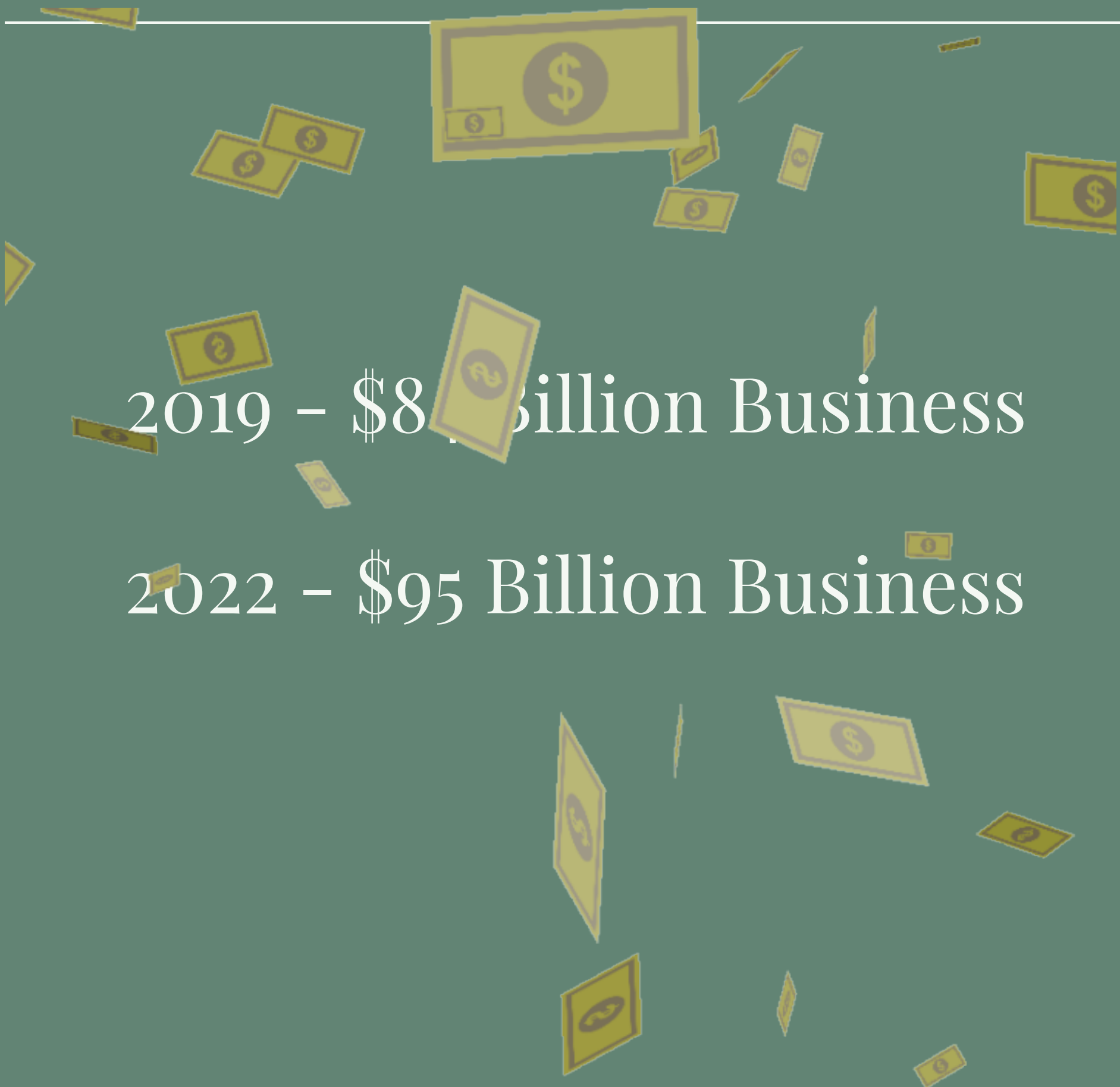
Project Sponsor:
Jacob Bailly

Online Advertising

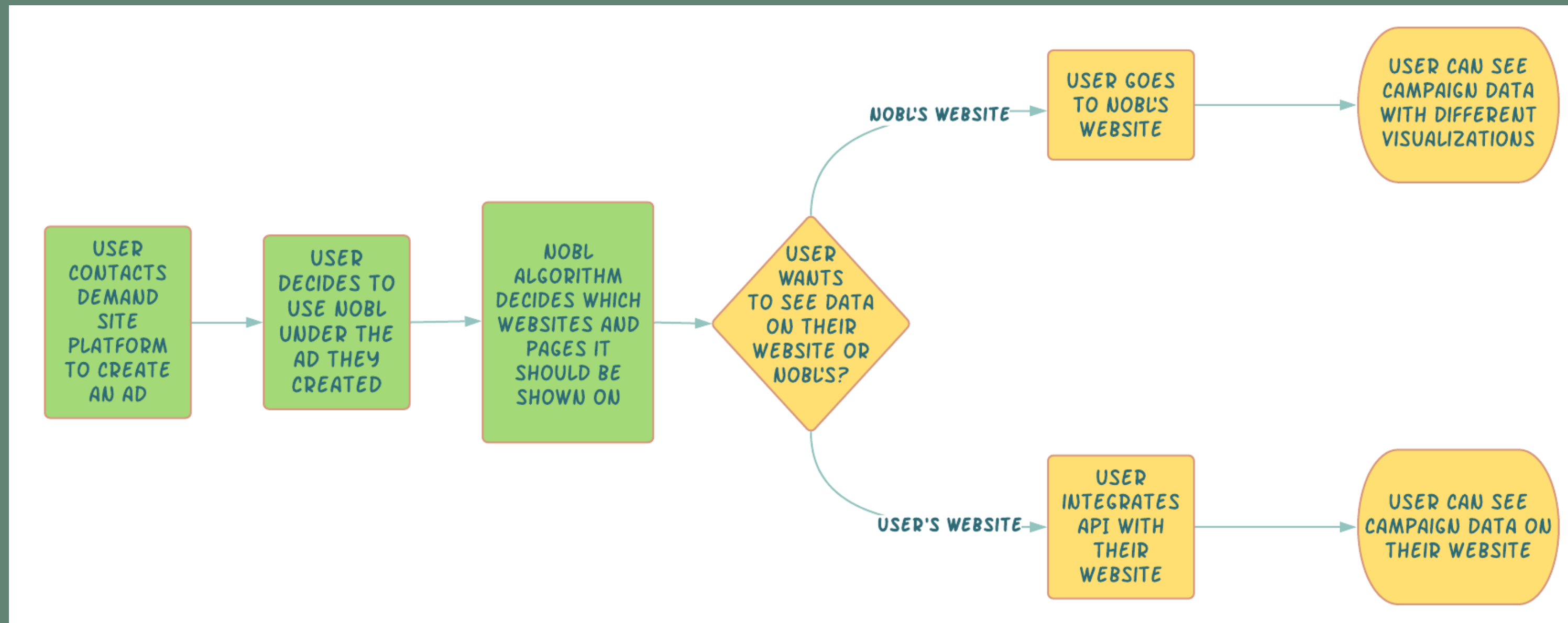


2019 – \$8 Billion Business

2022 – \$95 Billion Business



NOBL Media Workflow

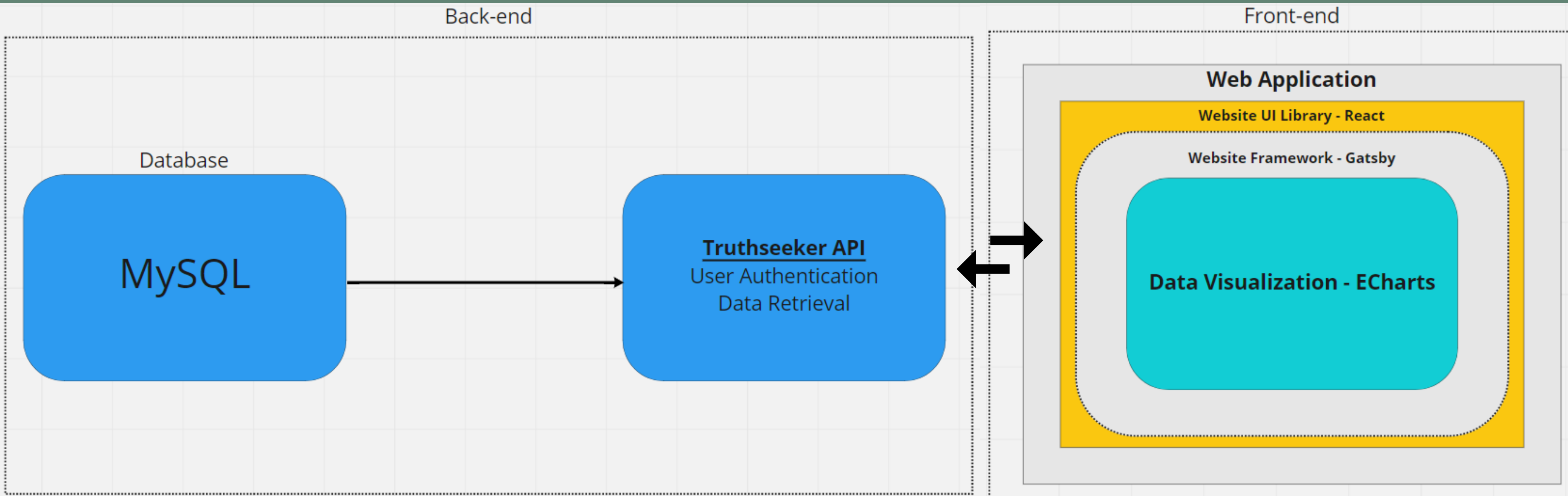


The Problem

- VISUALIZATION
- DATA
ABSTRACTION
- ADVERTISEMENT DATA

The Solution

- 1. WEB APPLICATION
- 2. API



MockUp Solution

- USER LOGIN
- DATA VISUALIZATION
- EXPORT DATA
- INTEGRATION

The screenshot displays the nōbi dashboard for a campaign titled "My Campaign: Trial". The interface includes a navigation sidebar on the left with options like Overview, Toxicity, Topics, Campaign Data, Get Code, and Get Log. The main content area shows campaign details (ID: 051520-00001, Start Date: 05/15/20, Status: Completed) and a Brand Value Calculator. Below this are four key metrics: Most Impressions (11.2k), Fewest Impressions (0.4k), Lowest Quality Topic (57), and Highest Quality Topic (72). At the bottom, a "IMPRESSIONS BY SCORE" chart shows a distribution of quality scores for the topic "Crime, law and justice", with a peak at a score of 58.

CAMPAIGNS / TOPICS

My Campaign: Trial

Campaign ID: 051520-00001 Start Date: 05/15/20 Status: Completed

Brand Value Calculator: Campaign Cost or CPM

Most Impressions

11.2k

Lifestyle & Leisure: 11,247
Unique URLs: 7,990

Fewest Impressions

0.4k

Religion & Belief: 437
Unique URLs: 419

Lowest Quality Topic (avg score)

57

Disaster, accident & emergency...
Median = 52; Mode = 69

Highest Quality Topic (avg score)

72

Education
Median = 65; Mode = 74

IMPRESSIONS BY SCORE (79,294 Unique URLs)

SELECT TOPIC:

Crime, law and justice: (31,717 Unique URLs)

Impressions (in thousands)

Quality

58

Requirements Acquisition

- WEEKLY CLIENT MEETINGS
- RESEARCH



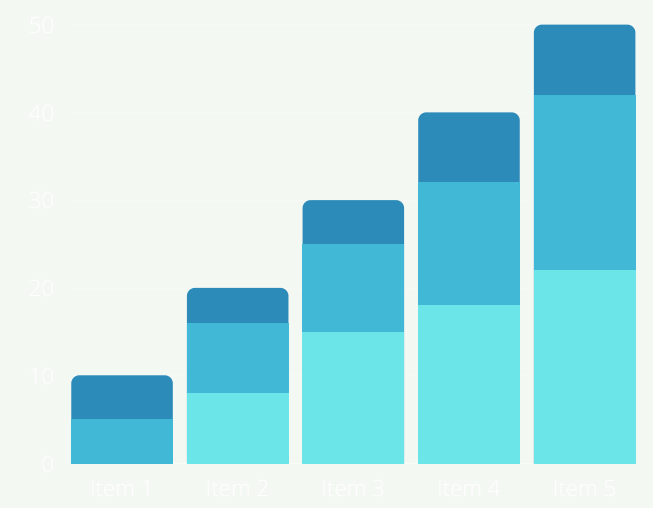
Domain-Level Requirements

Team Truthseeker 2021

API FUNCTION



WEB APPLICATION GRAPHS



EXTERNAL API



Functional Requirements

What functions the system provides

Data Functions

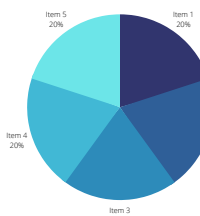
Security Functions



API Data Retrieval



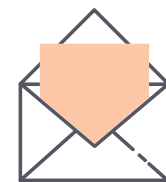
Data Exporting



Data Visualization



User Authentication



User Invitation



Performance Requirement

Expectations on the system's performance



Charts/Graphs Rendering Speed - Responsiveness



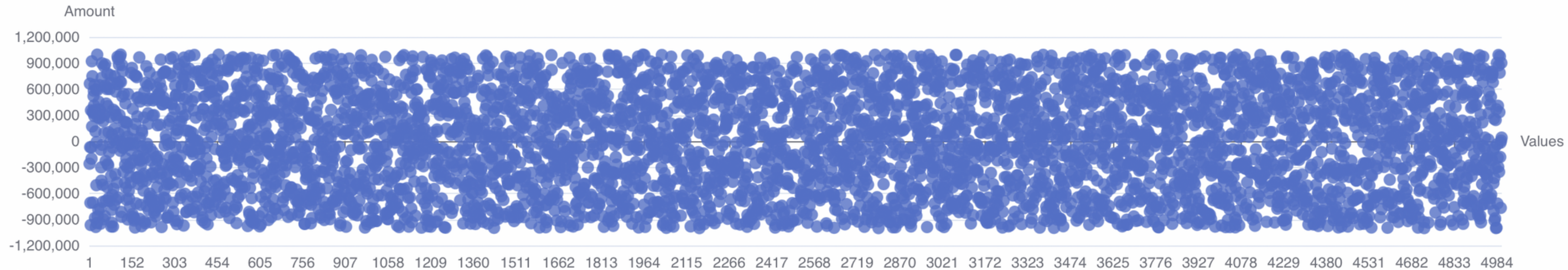
API Response Speed - Avoid bottlenecking website



API Concurrent Use - Capacity for Simultaneous Users

Echarts Rendering Capabilities

Team Truthseeker ECharts Demo



Time To Render: 100 ms

Team Truthseeker ECharts Demo



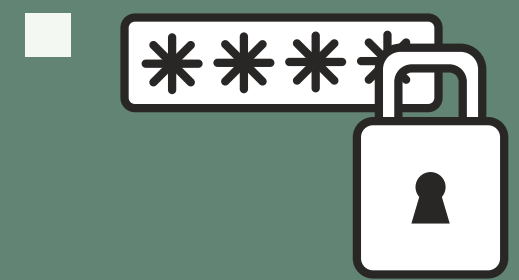
Time To Render: 72 ms

ENVIRONMENTAL CONSTRAINTS

WHAT THE SYSTEM IS
LIMITED TO



- MySQL Database



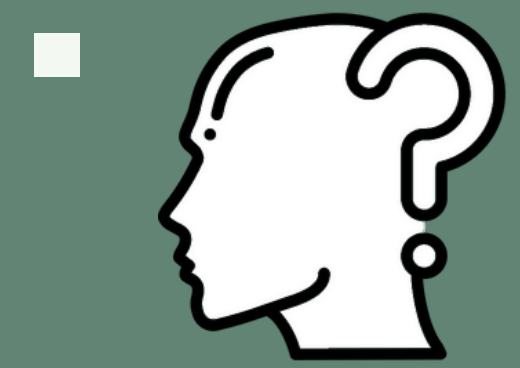
COMPROMISED AUTHENTICATION

Unauthorized Access to Other Users Accounts.



ATTACK VECTOR FOR DATABASE

Website/API could be used by attackers to gain a foothold in NOBL's internal network.



DATA MISREPRESENTATION

Dashboard Graphs Could Be Misleading if Designed Poorly

Risks

Feasibility

TECHNOLOGIES

- React - Website Frontend UI
- Gatsby - Static Website Rendering
- ECharts - Dynamic Chart Generation
- REST - Limit Access to the database
- Auth0 - Handle Authentication



Plan and Schedule

Team Truthseeker Project Plan



Conclusion

TEAM
TRUTHSEEKER
Web App + API

NOBL
MEDIA
NOBL A.I.