

**MICHIGAN STATE**  

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**UNIVERSITY**

# Project Plan Presentation

## Smart Little Hunter of Fakes

### The Capstone Experience

Team Scout

Lukas Nolta

Mike McVey

D'Angela Anderson

Meghna Nair

Yifeng Lu

Georgios Siozios

Department of Computer Science and Engineering  
Michigan State University

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*From Students...  
...to Professionals*

# Functional Specifications

- **Product Search:** find online marketplace listings based on a specific given set of copyright images and text
- **Product Comparison:** compare the copyright image and text with the marketplace listing and provide a Real/Fake/Unknown response
- **Prediction Improvement:** The system will return better quality results with repeated use.



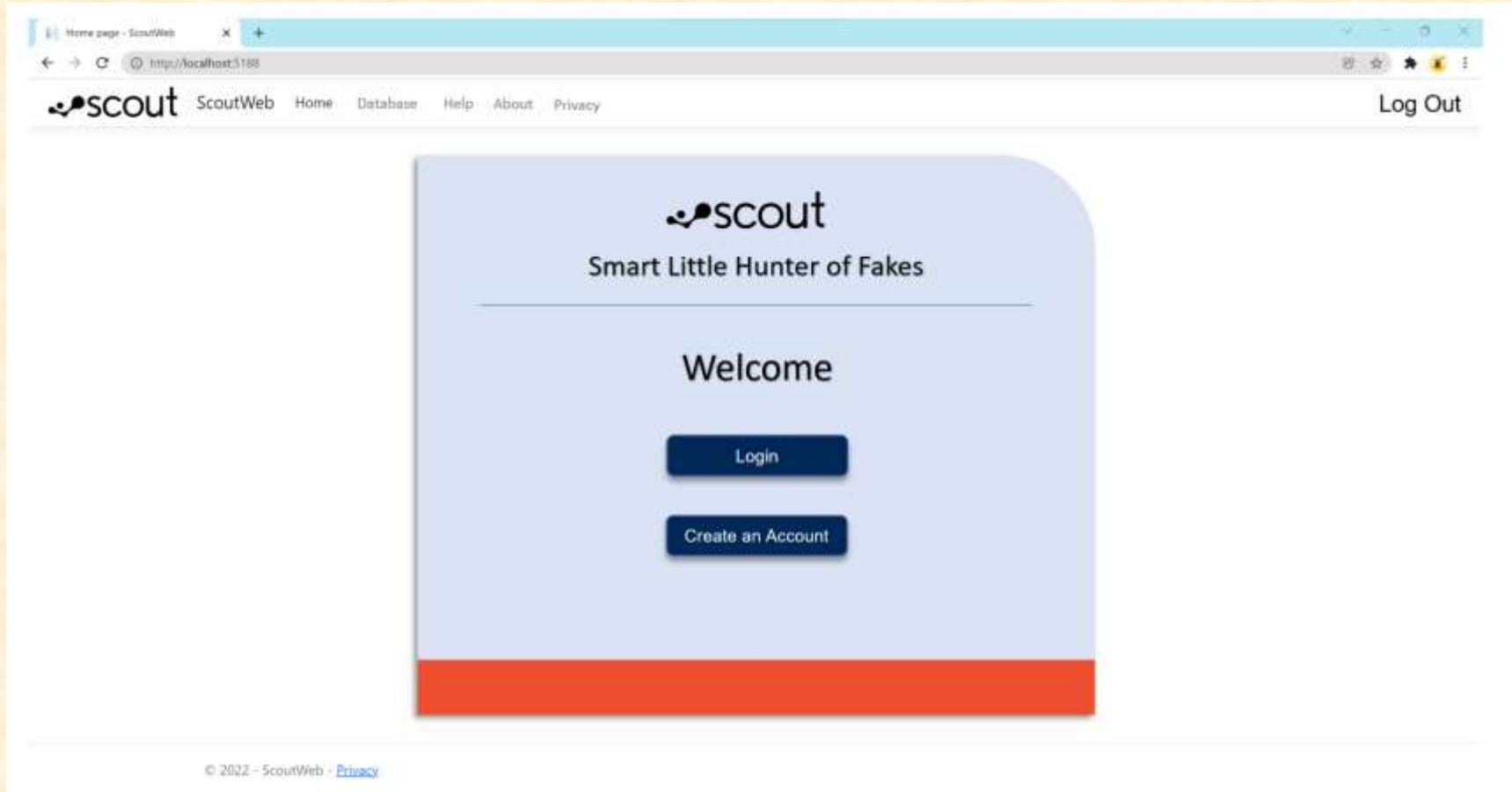
# Design Specifications

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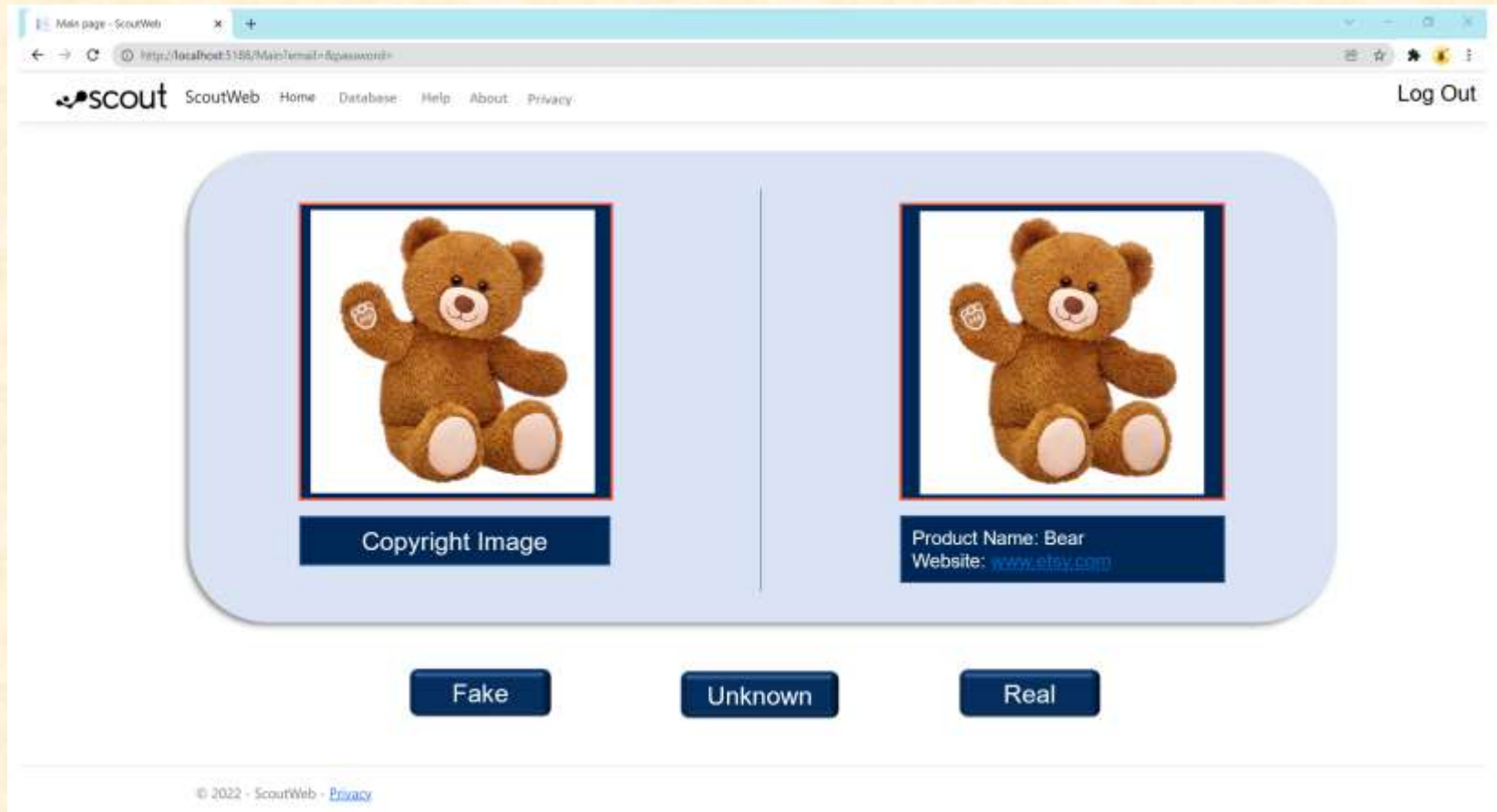
- Product Comparison Tracker
  - Specialist compares listings and determines authenticity
- Product Database
  - Specialist can access previously analyzed products
- Product Information
  - More information about a product
- Specialist Information
  - More information about the specialists who have rated products



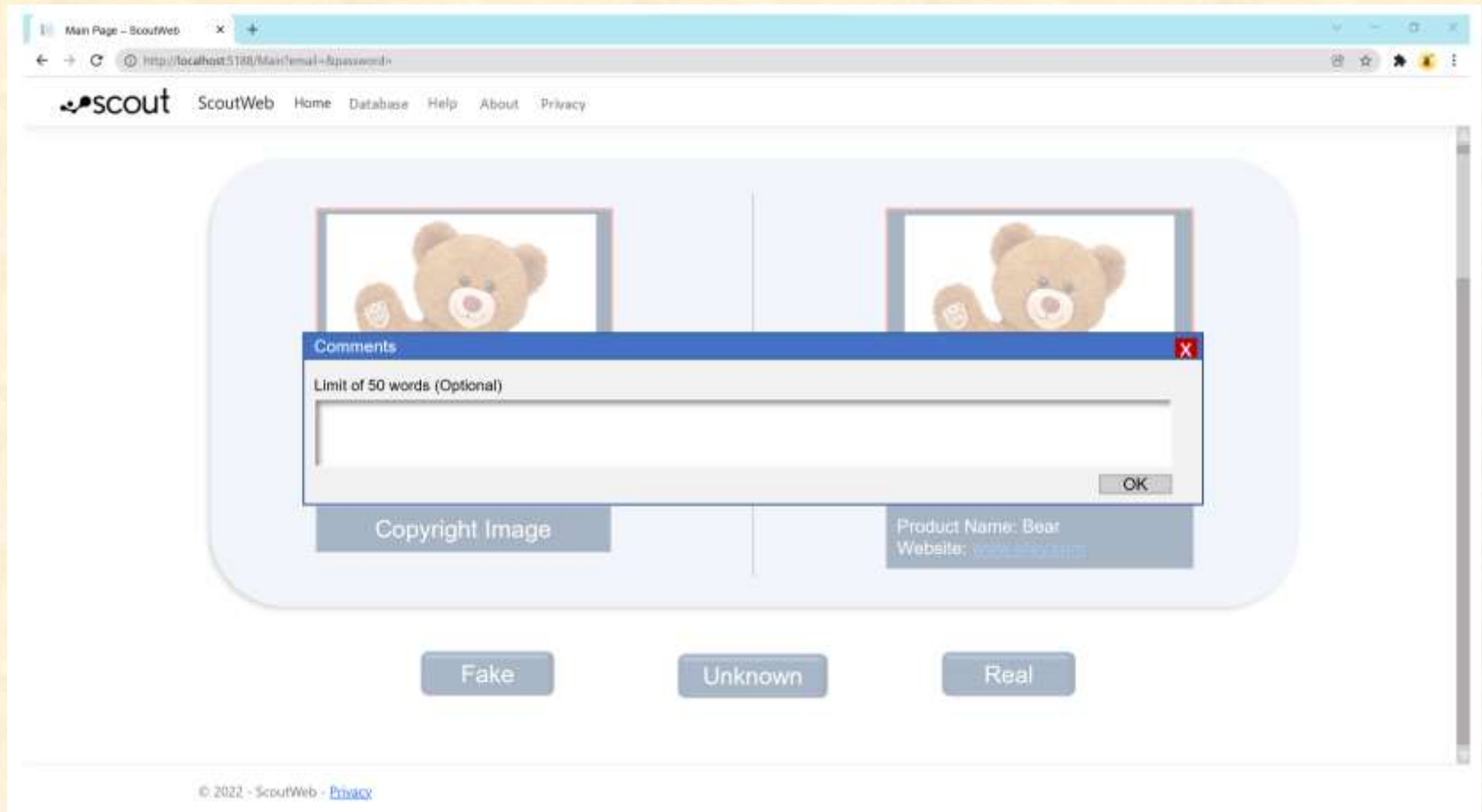
# Screen Mockup: Welcome Screen



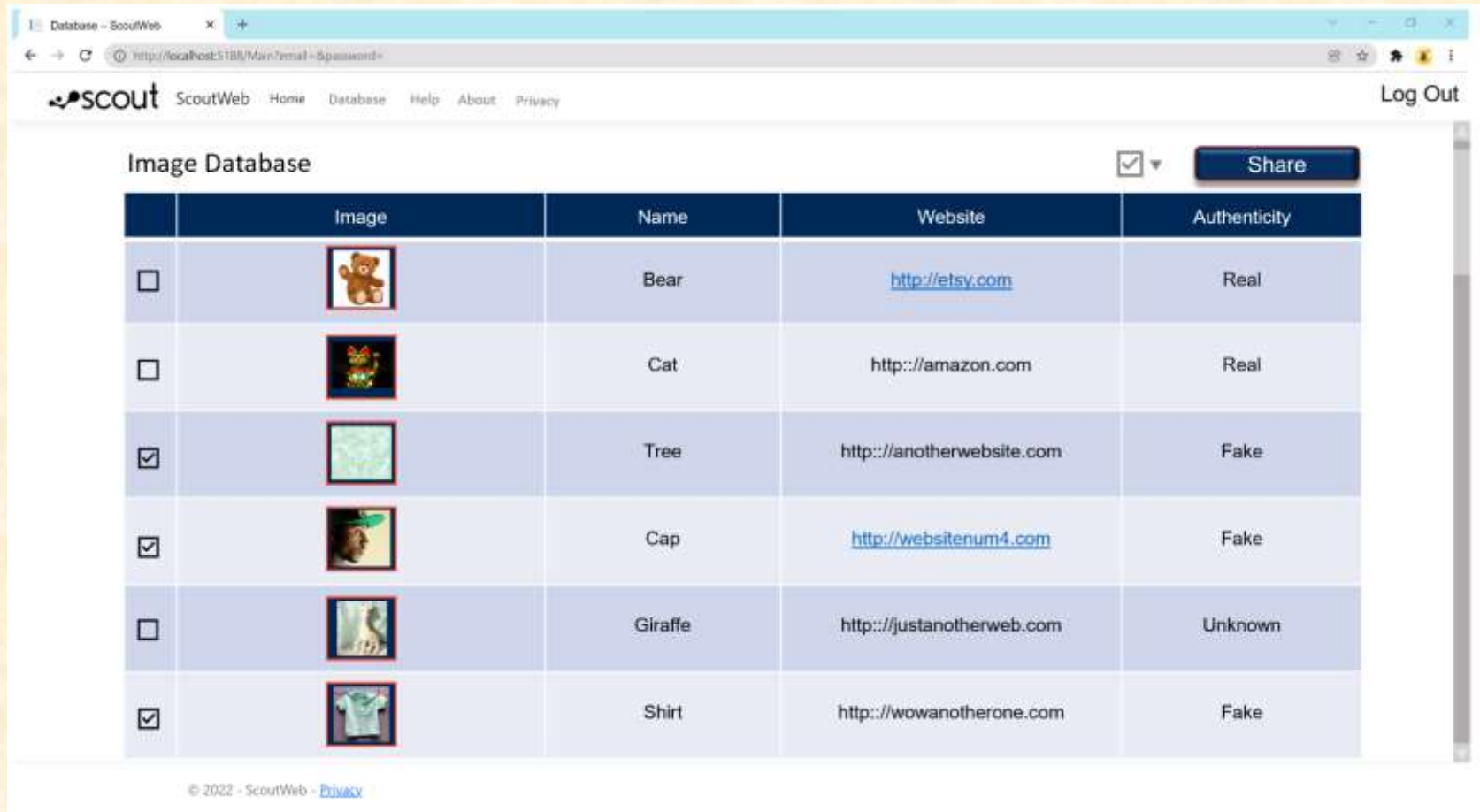
# Screen Mockup: Main Screen



# Screen Mockup: Main Screen (Comment Dialog)

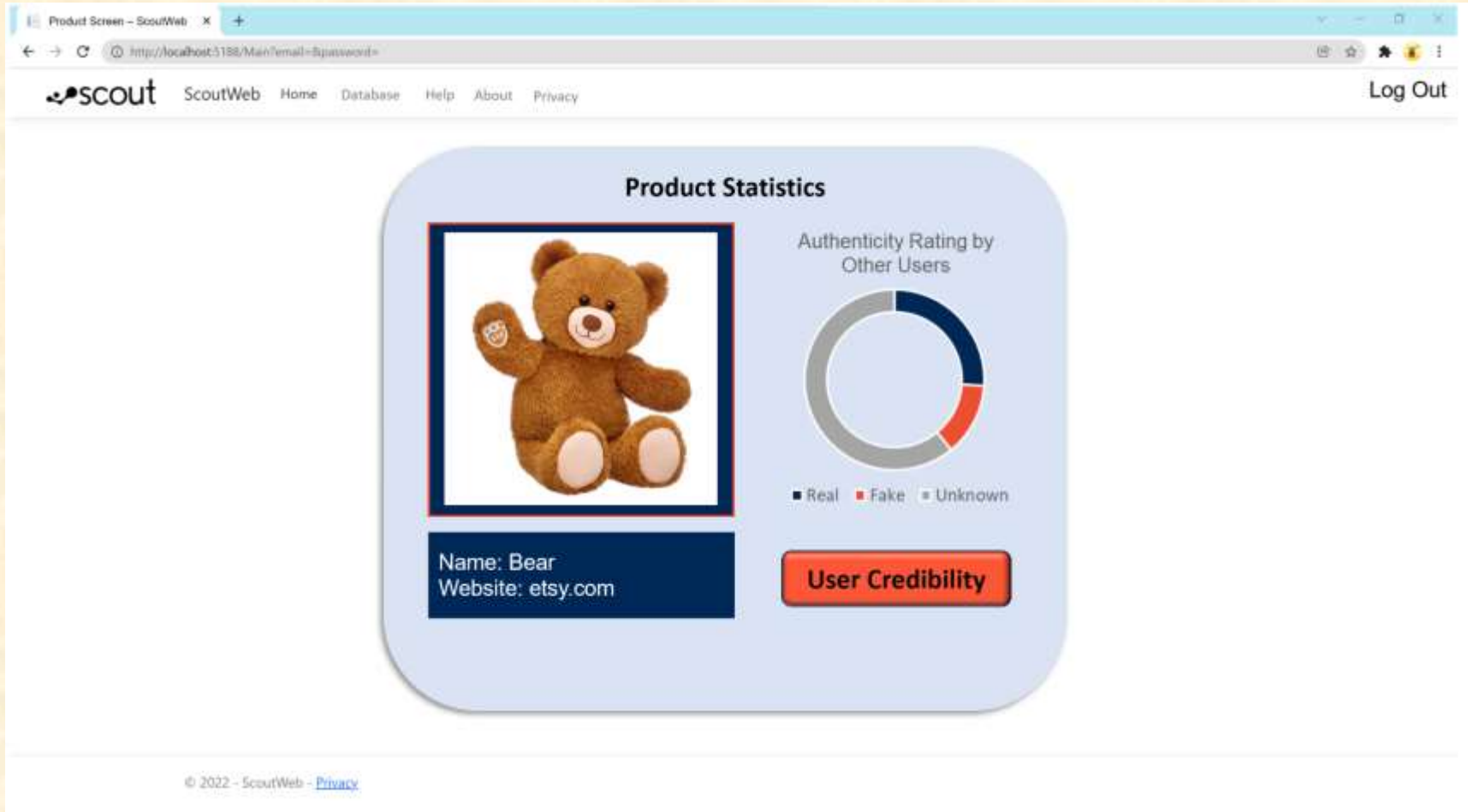


# Screen Mockup: Database Screen



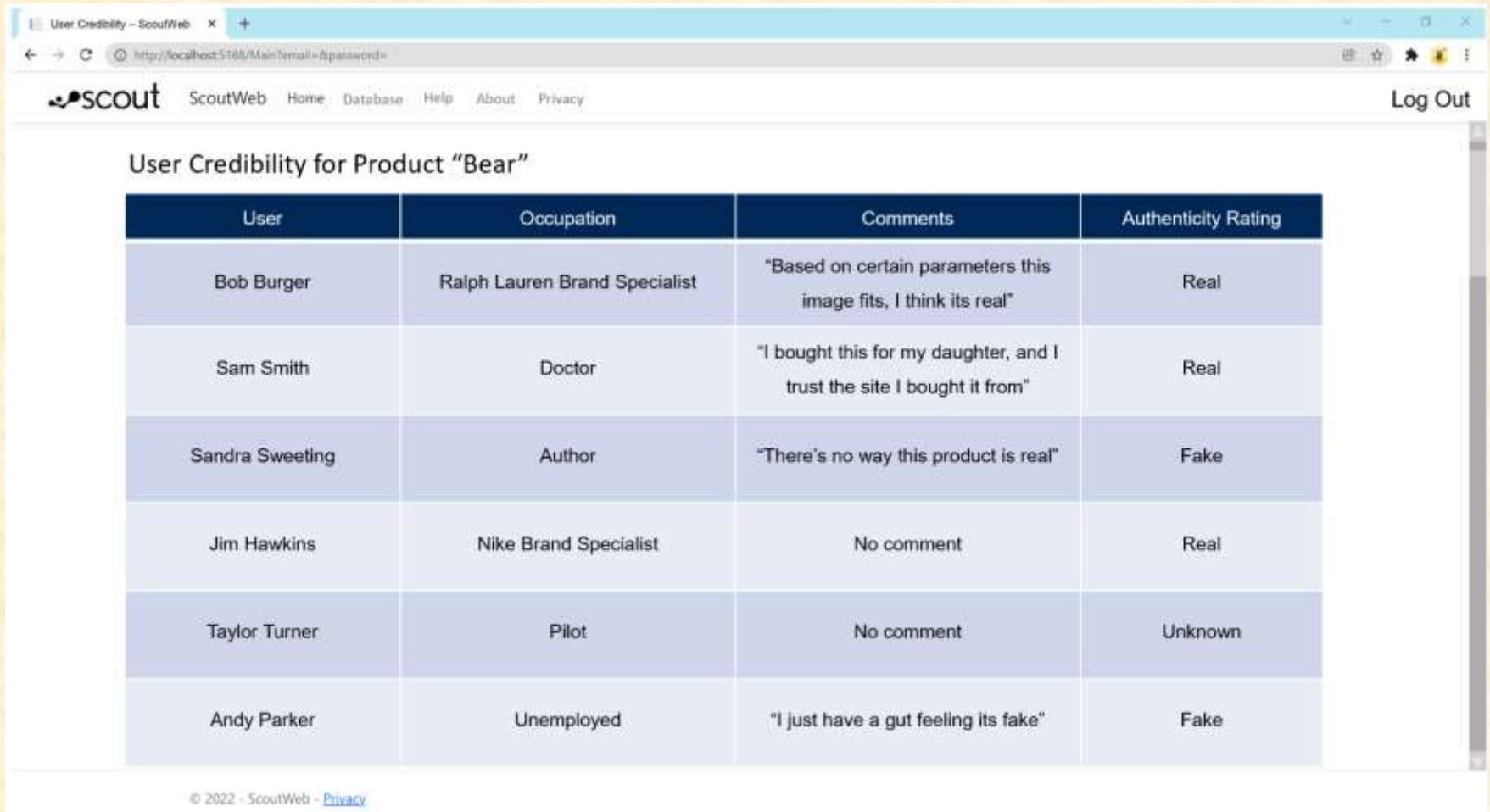


# Screen Mockup: Product Screen





# Screen Mockup: User Credibility Screen



The screenshot shows a web browser window with the URL `http://localhost:5188/Main?email=&password=`. The page title is "User Credibility - ScoutWeb". The navigation menu includes "ScoutWeb", "Home", "Database", "Help", "About", "Privacy", and "Log Out". The main content area is titled "User Credibility for Product 'Bear'" and contains a table with the following data:

User	Occupation	Comments	Authenticity Rating
Bob Burger	Ralph Lauren Brand Specialist	"Based on certain parameters this image fits, I think its real"	Real
Sam Smith	Doctor	"I bought this for my daughter, and I trust the site I bought it from"	Real
Sandra Sweeting	Author	"There's no way this product is real"	Fake
Jim Hawkins	Nike Brand Specialist	No comment	Real
Taylor Turner	Pilot	No comment	Unknown
Andy Parker	Unemployed	"I just have a gut feeling its fake"	Fake

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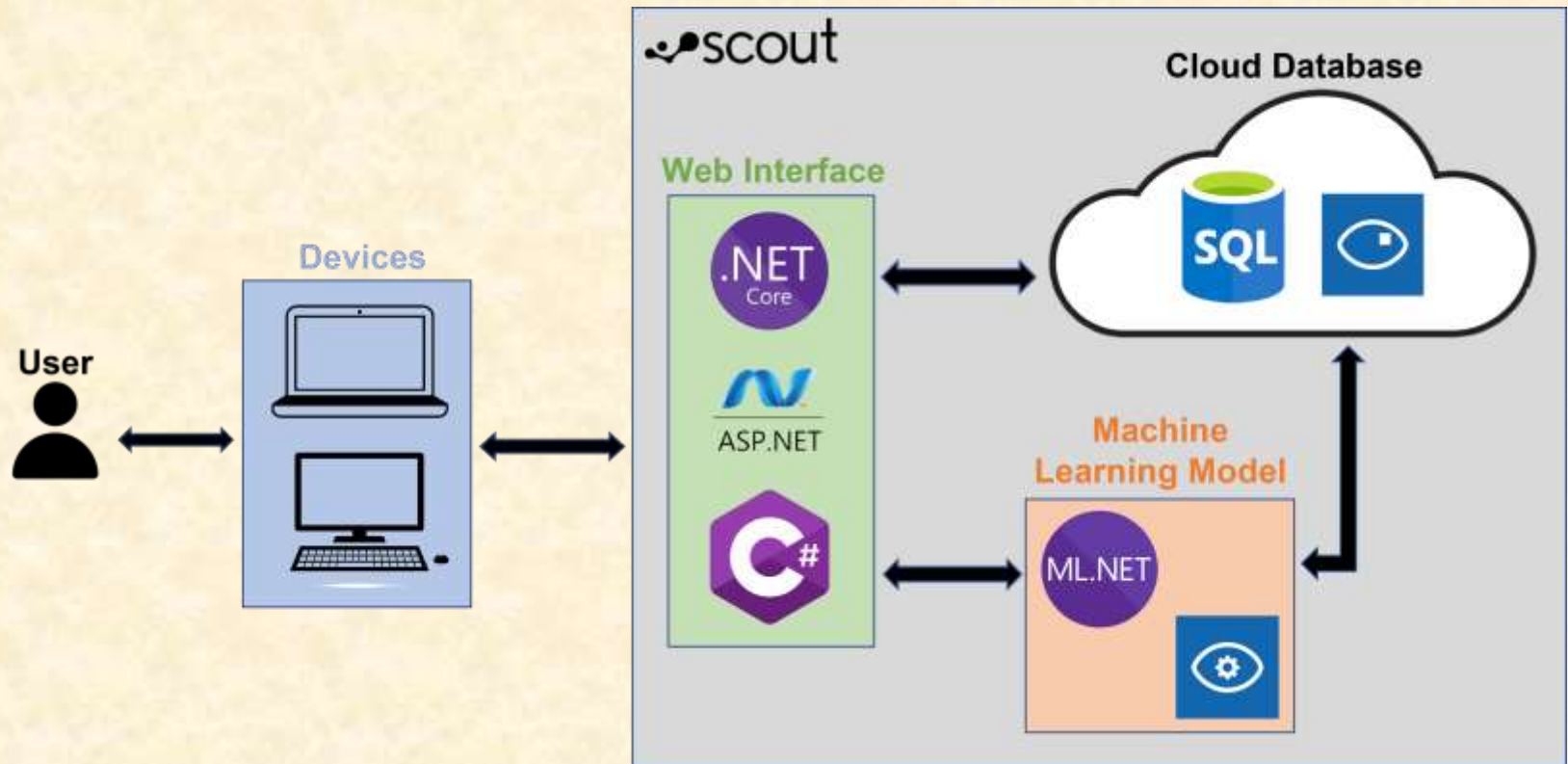


# Technical Specifications

- .NET / C#
- Microsoft Azure:
  - SQL Database
  - Cognitive Services:
    - Custom Vision
    - Computer Vision
- ML.NET Model Builder
- ASP.NET



# System Architecture



# System Components

- Hardware Platforms
  - Web Interface
  - Desktop, laptop, cell phone, etc.
  - Any device with a web browser
- Software Platforms / Technologies
  - Programming languages:
    - C#
    - .NET
  - Platforms:
    - Windows
  - SDKs/ APIs:
    - ASP.NET
    - Microsoft Azure:
      - ❖ Custom Vision
      - ❖ Computer Vision
      - ❖ SQL Database
    - Microsoft SQL Server Management Studio



# Risks

- Risk 1:
  - Dealing with Real, Fake, and Unknown
  - Strong machine learning system, also tracking additional information such as site security, text description, and item verification
- Risk 2:
  - Authentication and Company Association
  - Sign in functionality, authentication for users and company, storing of user information
- Risk 3:
  - Useful Feedback
  - Easy to use interface that allows new products to be added, also access to information of each product such as product authenticity rating and real or fake listings of the product through the product page
- Risk 4:
  - Automation of our System
  - Strong connections between the three portions of our project. Useful training of ML model so when we let our model run, we have useable responses.



# Questions?

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