

BotBlocker

Your Voice Matters. Don't Let AI Drown It Out

Milestone 3

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PROJECT OVERVIEW





BotBlocker is a browser extension and website
that uses community intelligence to identify and
block automated social media profiles.

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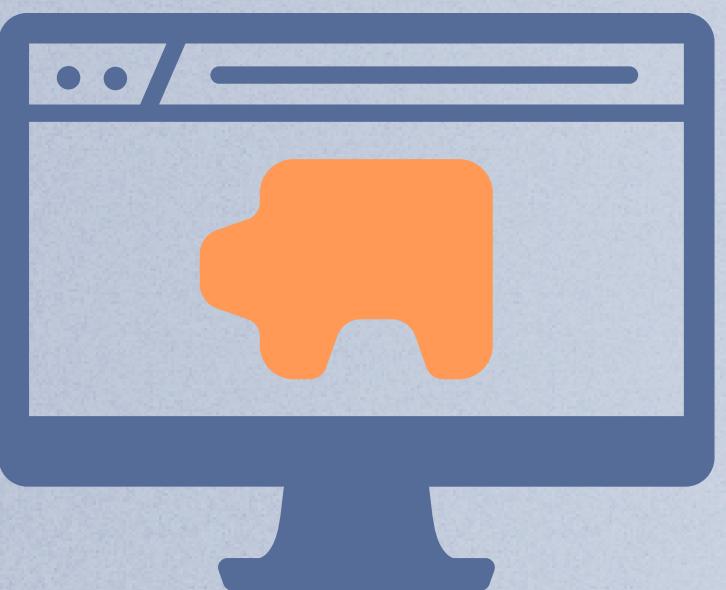
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INTRODUCTION



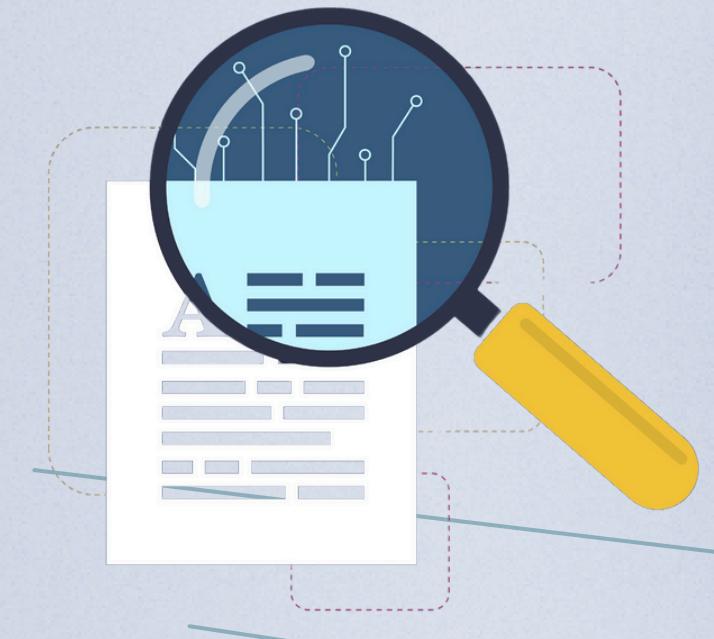
AI Bots

Manipulating engagement
and spreading
misinformation.



Website + Extension

Detect and block interactions
with AI profiles.



Detection and Blocking

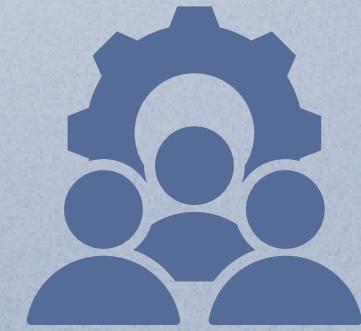
Identifying AI-driven
accounts for transparency.

THE STATE OF RELATED WORK

CRITERION	 PEGABOT	 LIVEDUNE	 Bot Sentinel	 BotBlocker
Main Social Network	Twitter/X	Multiple Social Networks	Twitter/X	Multiple Social Networks
User Interaction	None	None	Score Display	Community Voting & Feedback
Blocking Management	Not Available	Not Available	Reliability Score	Personal & Community Blocklists
Accessibility	Free	\$15,30/month for 5 accounts	Free	Free and open to contributions
Main Advantages	Ease of use, free access	Artificial Engagement Identification	High accuracy in identifying manipulative profiles	All of the before + Comprehensiveness, active user participation, integration with multiple networks
Main Limitations	Currently inactive	Focus only on influencers and advertising	Restricted to Twitter/X; does not detect neutral bots	None of the before
Focus of Analysis	Behavior and Profile Features	Engagement and Audience Authenticity	Toxicity and Coordinated Manipulation	Bot Networks, Misinformation, and Coordinated Attacks

FUNCTIONAL REQUIREMENTS

User management



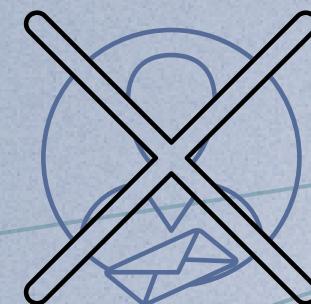
- Register & login.
- Admins = full verifier access.
- Role-based permissions.
- Admins can change roles.

Bot Detection



- "Bot" or "Not Bot."
- Community-based scoring.
- Evaluation history.
- Alerts for high vote activity.
- Verification seals.

Blocklists



- Personal blocklists.
- Global blacklist.
- Auto-block high-risk profiles.

Chrome Extension



- Evaluate profiles on social media.
- Display profile scores.
- Custom filters for profiles.
- Block accounts directly.
- Login/create account in extension.

Monitoring

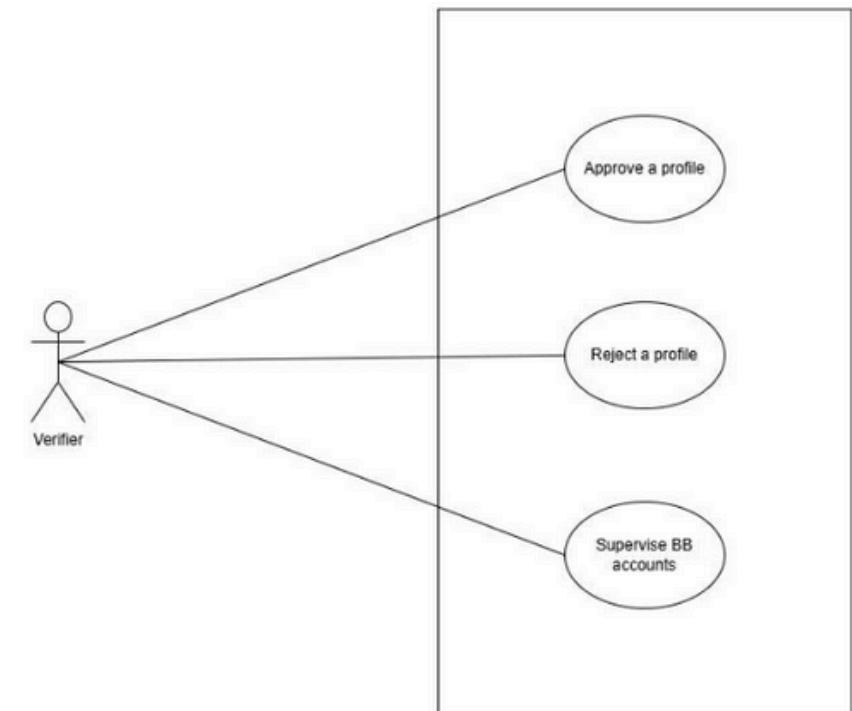
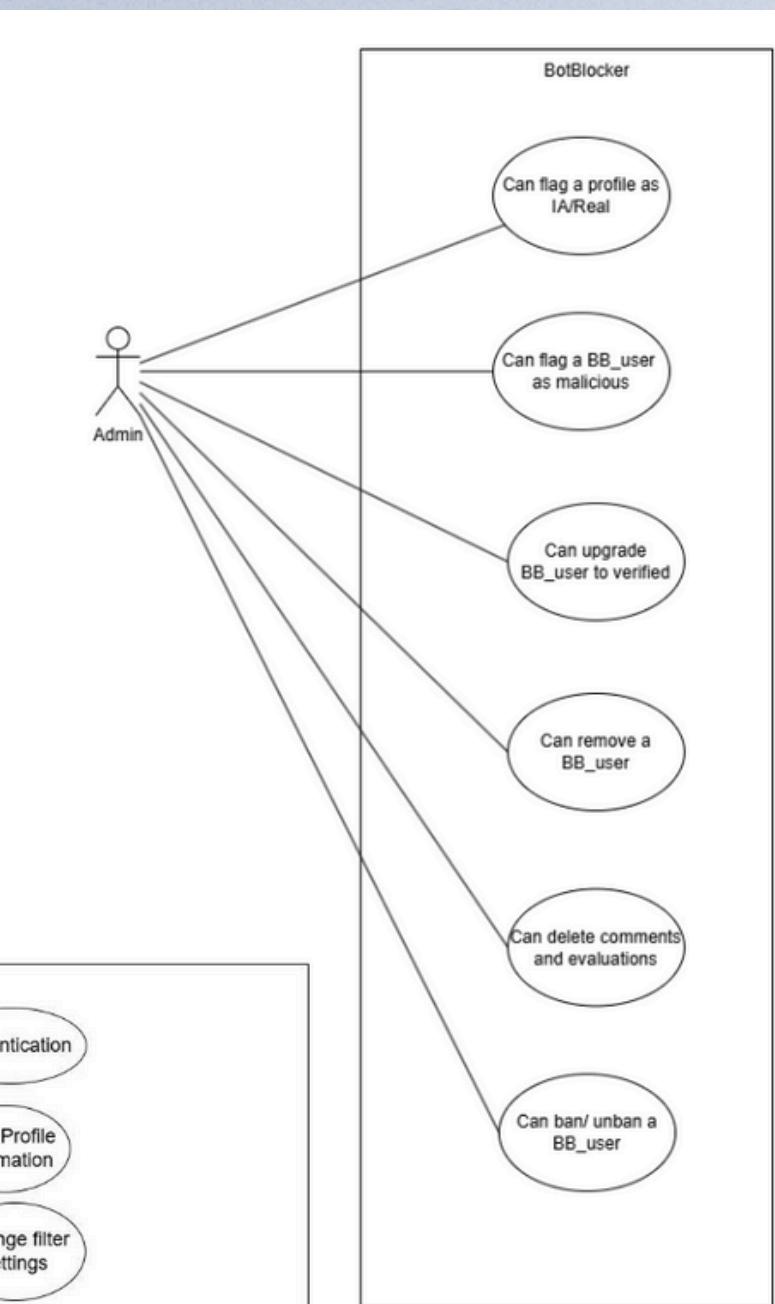
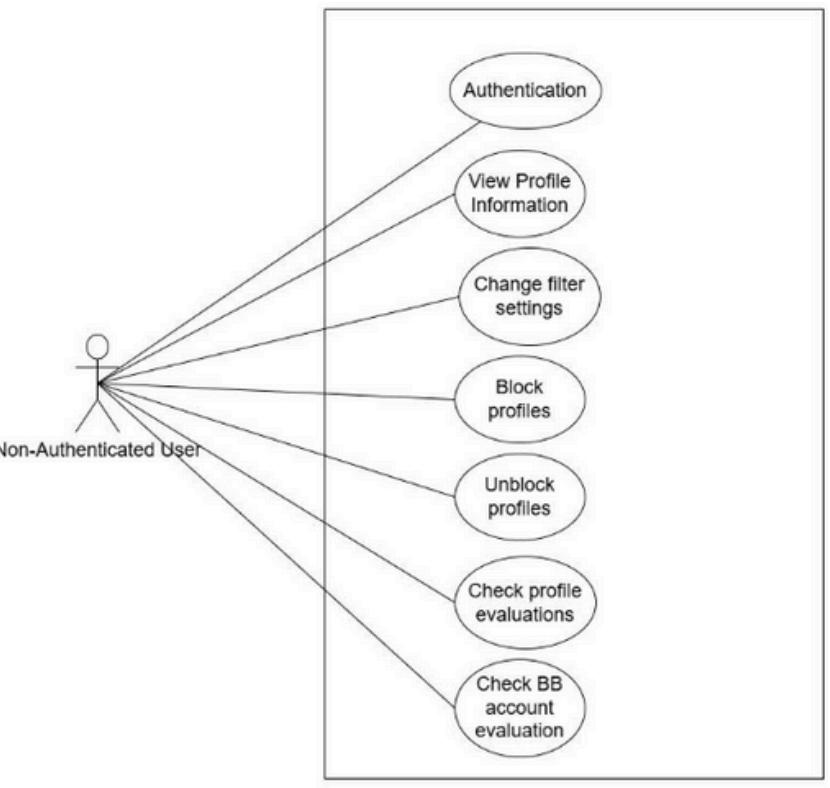
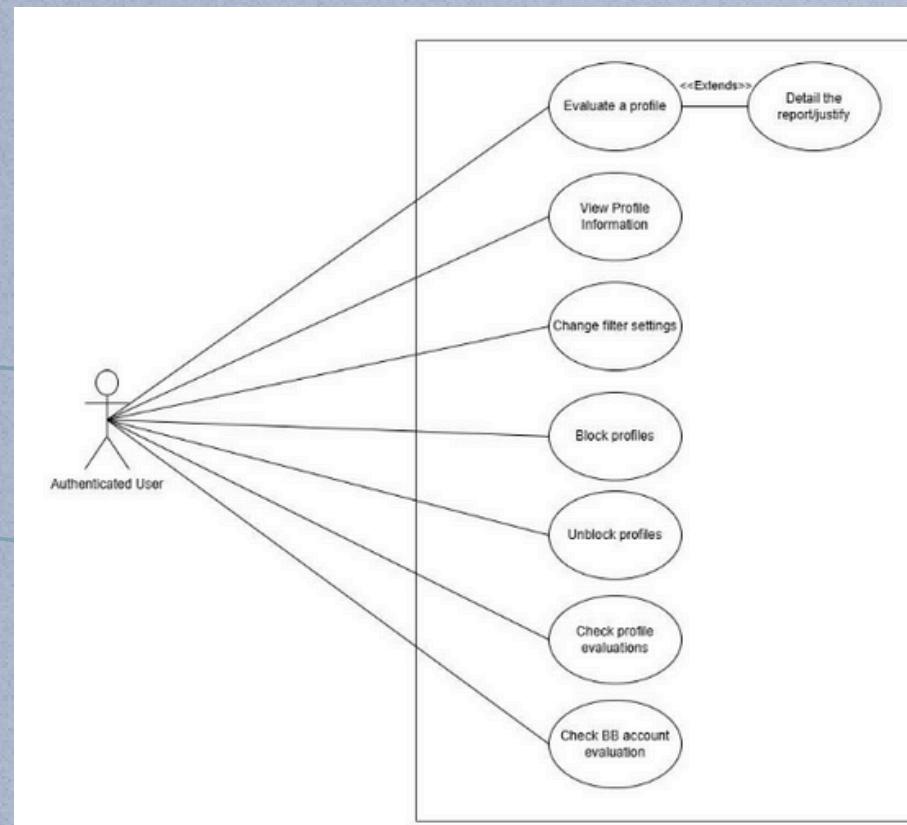


- Suspend accounts (admins).
- Remove evaluations (admins).
- Ban accounts (admins).
- View suspicious activity logs.
- Alerts for suspicious patterns.

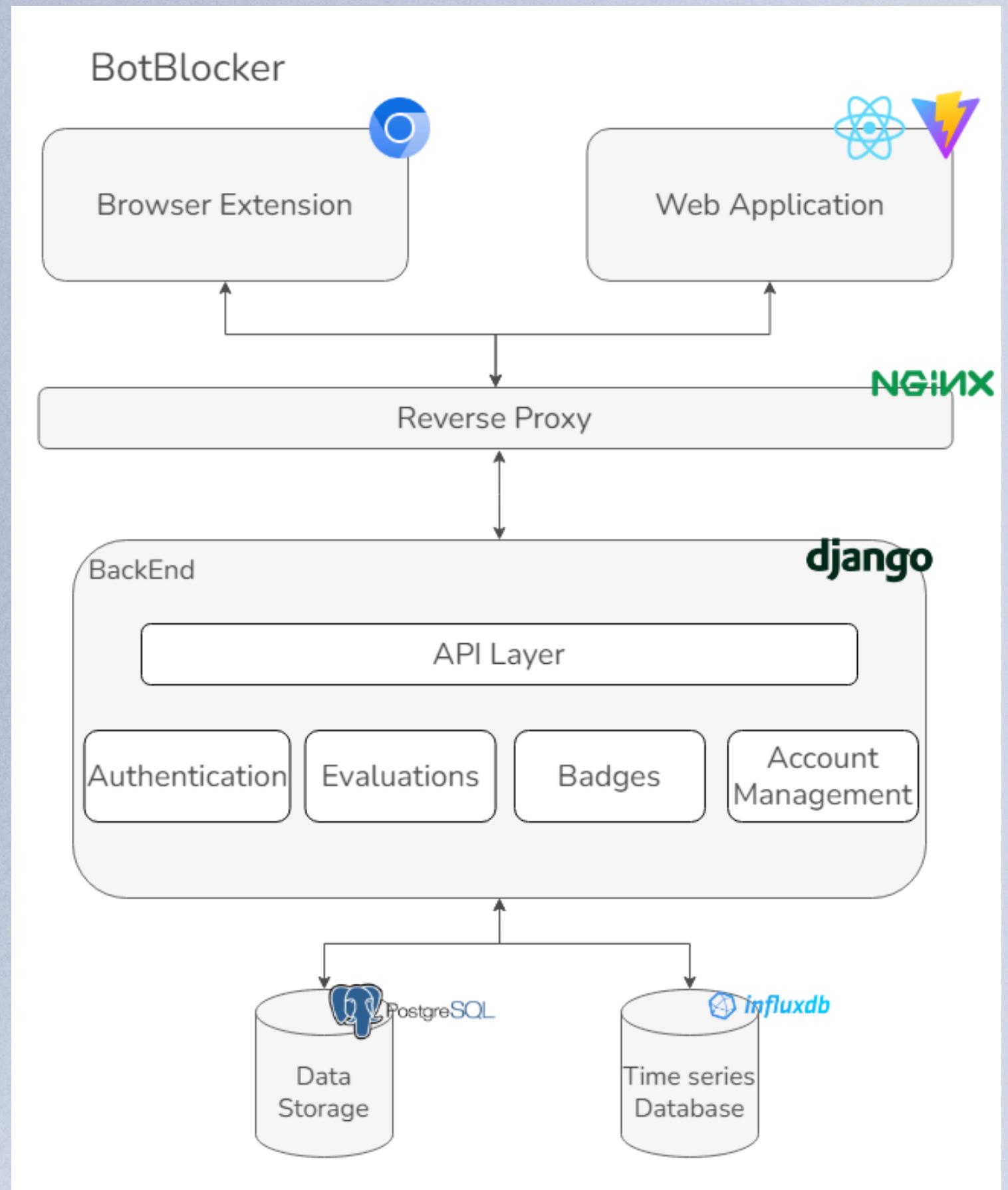
USE CASES

Actors

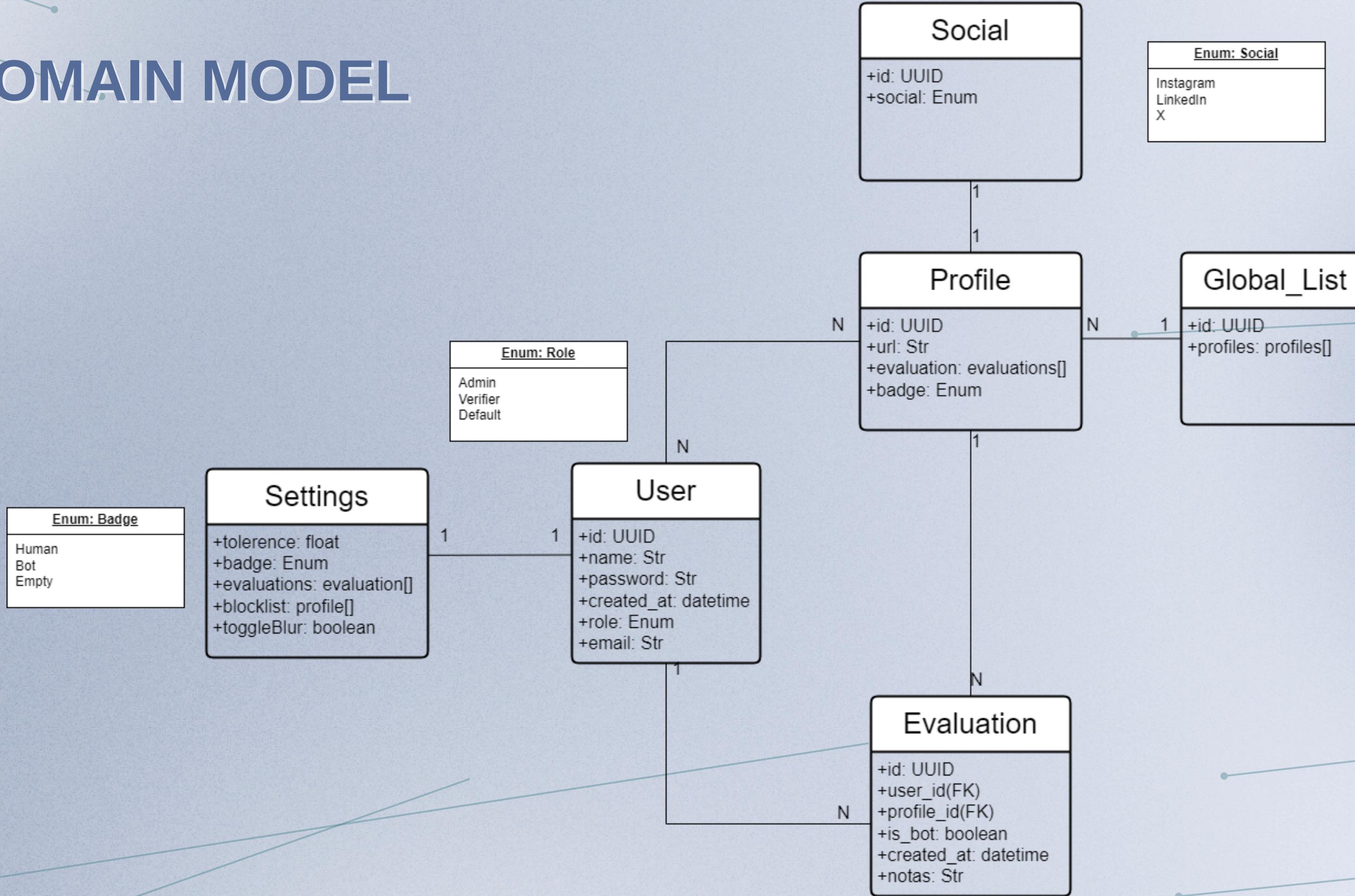
- Authenticated user
- Non-authenticated user
- Verifier
- Admin



ARCHITECTURE



DOMAIN MODEL



VIDEO DEMO - ACCOUNT CREATION

Google Chrome Apr 7 19:53 100%

BotBlocker Home / X Select user to change | Extensions

For you Following

What's happening?

Elon Musk @elonmusk • 18m



2.1K 2.6K 22K 1.6M

Science News @ScienceNews • 37m

Despite living in hot deserts, Gila monsters prefer cooler microhabitats, like shady burrows. As the Mojave heats up, these cool zones may vanish.



Gila monsters may struggle to survive climate change

Subscribe to Premium

Subscribe to unlock new features and if eligible, receive a share of revenue.

Subscribe

Who to follow

TIME @TIME Follow

PlayStation @PlayStation Follow

Kotaku @Kotaku Follow

Show more

What's happening

From the Desk of Anthony Pompliano LIVE

Trending in Portugal zé pedro

Trending in Portugal o cláudio

Hide

Fullscreen Projector (Preview)

Fullscreen Projector (Program)

Start Streaming

Start Recording

Start Replay Buffer

Start Virtual Camera

Exit

Post

Home Explore Notifications Messages Grok Bookmarks Communities Premium Verified Orgs Profile More

BotBlocker @BotBlockerPI ...

VIDEO DEMO - BLOCKING A PROFILE

For you

Following

Gila monsters may struggle to survive climate change

From sciencenews.org

Trey  @UTDTrey · 1h
We don't even have good relegation battles anymore, WTF IS THIS

17		Wolves	31	9	5	17	32
18		Ipswich Town	31	4	8	19	20
19		Leicester City	30	4	5	21	17
20		Southampton	31	2	4	25	10

Science News  @ScienceNews · 1h
Lightning shapes tropical forests in unexpected ways.
Certain trees even use them to their benefit.

BotBlocker @BotBlockerPI ...

Hide

Fullscreen Projector (Preview)

Fullscreen Projector (Program)

Follow Start Streaming

Start Recording

Start Replay Buffer

Start Virtual Camera

Exit

From the Desk of Anthony Pompliano LIVE

Trending in Portugal Kokçu ...
1,136 posts

Politics · Trending Trump ...
3.01M posts

Trending in Portugal Viseu ...

Trending in Portugal zé pedro ...

Show more

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More ... © 2025 X Corp.

VIDEO DEMO - BOT VOTING

Google Chrome Apr 7 20:01

BotBlocker Home / X Science News (@ScienceNews) Extensions Select profile to change Extension Settings

x.com/home

X

- Home
- Explore
- Notifications
- Messages
- Grok
- Bookmarks
- Communities
- Premium
- Verified Orgs
- Profile
- More

Post

For you

Rank	Team	W	D	L	GD	PPG
18	Ipswich Town	31	4	6	19	20
19	Leicester City	30	4	5	21	17
20	Southampton	31	2	4	25	10

85 92 1.8K 43K

Science News @ScienceNews · 1h
Lightning shapes tropical forests in unexpected ways. Certain trees even use them to their benefit.

Some tropical trees act as lightning rods to fend off rivals

From sciencenews.org

3 1 5 7.5K

Trey @UTDTrey · 1h
Saka disrespect is crazy.

He's much better than Rodrygo

Football on TNT Sports @footballoontnt · 4h
Do you agree with this combined Arsenal and Real Madrid XI?

Subscribe to Premium
Subscribe to unlock new features and if eligible, receive a share of revenue.

Who to follow

- TIME @TIME
- Bill Ack... @BillAckman
- PlayStation @PlayStation

Show more

What's happening

From the Desk of Anthony Pompliano
LIVE

Trending in Portugal
Viseu

Politics - Trending
Trump

Fullscreen Projector (Preview)

Fullscreen Projector (Program)

Start Streaming

Start Recording

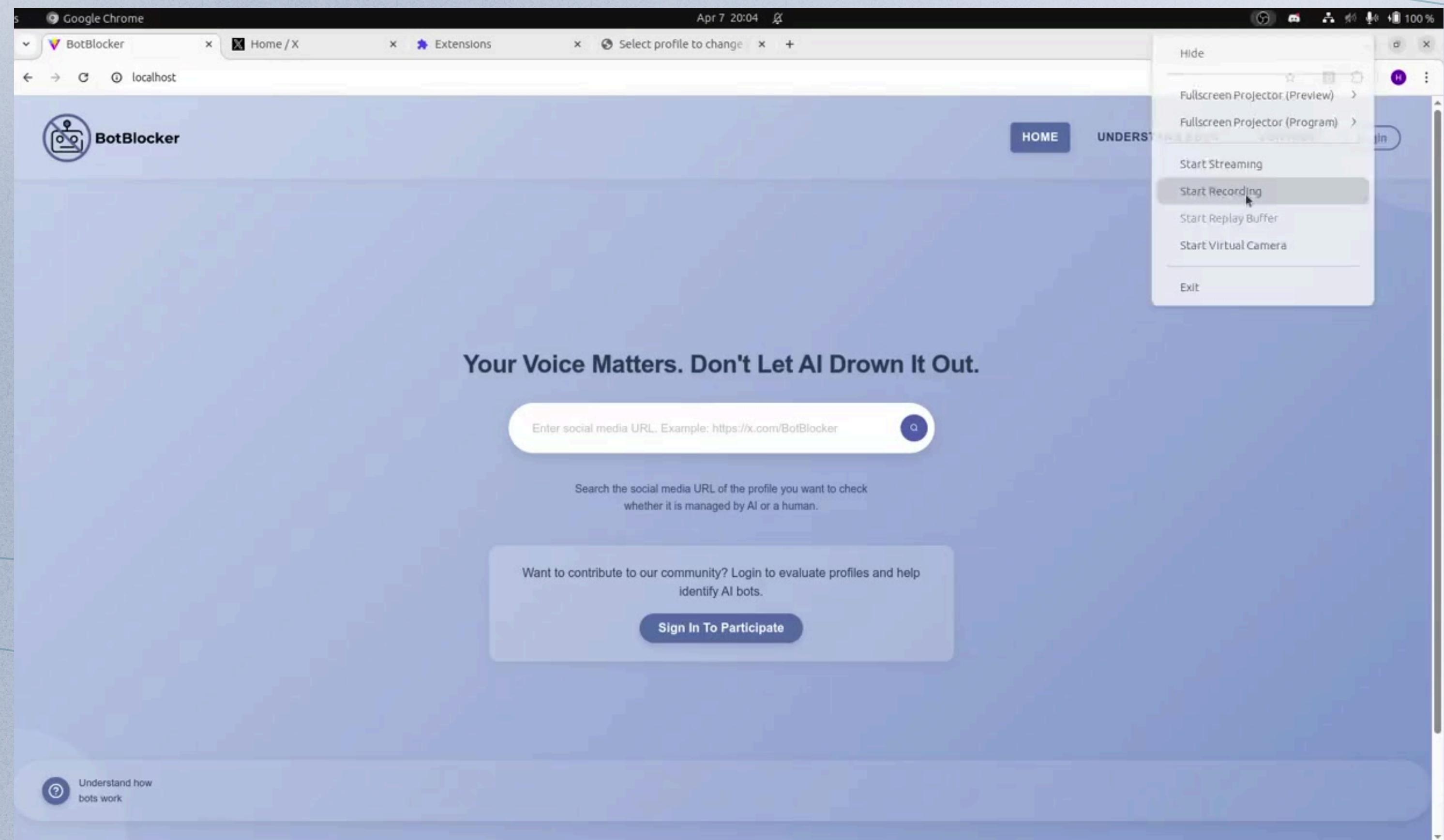
Start Replay Buffer

Start Virtual Camera

Exit

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VIDEO DEMO - WEBSITE



VIDEO DEMO - VERIFIER VIEW

The screenshot shows a Google Chrome browser window with the URL `localhost`. The main content is the BotBlocker homepage, which features a large purple header with the text "Your Voice Matters. Don't Let AI Drown It Out." Below the header is a search bar with placeholder text "Enter social media URL. Example: <https://x.com/BotBlocker>". A tooltip above the search bar provides instructions: "Search the social media URL of the profile you want to check whether it is managed by AI or a human." At the bottom of the page, there is a call-to-action button labeled "Sign In To Participate". A footer link "Understand how bots work" is also visible.

Google Chrome

Apr 7 20:04

BotBlocker

Extensions

Select profile to change

localhost

HOME

UNDERSTAND BOTS

CONTACT

Start Streaming

Start Recording

Start Replay Buffer

Start Virtual Camera

Exit

Your Voice Matters. Don't Let AI Drown It Out.

Enter social media URL. Example: <https://x.com/BotBlocker>

Search the social media URL of the profile you want to check whether it is managed by AI or a human.

Want to contribute to our community? Login to evaluate profiles and help identify AI bots.

Sign In To Participate

Understand how
bots work

PROJECT CALENDAR

10/02 - 17/02	18/02 - 24/02	25/02 - 03/03	04/03 - 10/03
<p>Project Foundation & Documentation Setup</p> <ul style="list-style-type: none"> • Use Case Diagram (JC, JV, Â) • GitHub Repository Organization (H) • Setup Documentation Website (AR, H) 	<p>Project Planning and Framework</p> <ul style="list-style-type: none"> • Project Calendar Creation (*) • Jira Project Setup (Â) • Project Presentation Preparation (*) • Definition of Context and State of the Art (JV) • High-Level Architecture Design (JC) 	<p>Requirements & UX Design</p> <ul style="list-style-type: none"> • Requirement Gathering (*) • Functional Requirements (JV) • Non-Functional Requirements (Â) • Define Personas and Scenarios (JC) • Develop the mockups (AR, H) 	<p>System Modeling</p> <ul style="list-style-type: none"> • Refine the state of the art (JV) • Technological Model (*) • Define the Domain Model (JC) • Make the Deployment Diagram (JC) • Presentation (*)
11/03 - 17/03	18/03 - 24/03	25/03 - 31/03	
<p>Extension Initiation and Database Setup</p> <ul style="list-style-type: none"> • Dockerize the project (H) • Database Configuration and Setup (Â, JC) • Extension Initialization and Configuration (Â, JC) • Development of Extension Popup Frontend (AR) • Backend API Implementation for Popup Interaction (JV) 	<p>Interface Development & API Integration</p> <ul style="list-style-type: none"> • Development of the extension interface and the user website (JC, H) • Develop the frontend for the verifier interfaces (AR) • Continue Implementation of RESTful API (JV, Â) 	<p>Blocking & Filtering System Development</p> <ul style="list-style-type: none"> • Develop the block system (JC, H, JV) • Develop the filtering / blacklist management (AR, Â) 	

PROJECT CALENDAR

01/04 - 07/04	08/04 - 14/04	15/04 - 21/04	22/04 - 28/04
Presentation and refinement <ul style="list-style-type: none">• Presentation (*)	Continue developing the block and blacklist management system	Finalize the block and blacklist management	Admin Interface & API Enhancement <ul style="list-style-type: none">• Develop the frontend of the admin interface• Continue Implementation of RESTful API
29/04 - 05/05	18/03 - 24/03	25/03 - 31/03	
Improving upon the filtering techniques	Demo + poster for students@deti & video <ul style="list-style-type: none">• Poster• Video• Demo• Finish technical report (*)	Final presentation <ul style="list-style-type: none">• Work on presentation (*)	

Thank you!

<https://botblocker-pi.github.io/Documentation/>



The screenshot displays two pages of the BotSentinel Documentation website:

- Top Page:** Features a large banner with the text "Your Voice Matters. Don't Let AI Drown It Out" and "Take Control of Your Online Space." It includes a subtext about identifying AI-managed accounts and a call-to-action to join the movement. To the right is an illustration of a white robot sitting at a laptop with a speech bubble.
- Middle Page:** Shows the "Milestones" section. The left sidebar lists four milestones: MS1 - Inception Phase, MS2 - Elaboration Phase, MS3 - Construction, and MS4 - Transition. The main content area shows four cards corresponding to these milestones: "MS1 - Inception Phase" (1 item), "MS2 - Elaboration Phase" (1 item), "MS3 - Construction" (1 item), and "MS4 - Transition" (1 item). Below this is a "Project Description" section.
- Bottom Page:** Shows the "Background" section, which includes a small illustration of a person and a robot at a desk. The text discusses the rise of AI-driven bots on platforms like Twitter and the project's goal to develop a system for identifying and blocking them using community-based evaluations.