Comment Anywhere

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1 Motivation

Internet denizens have long found ways to communicate ideas and have vibrant communications about a wide variety content. However, these discussions typically are not supported directly alongside the content. The usual avenues of discourse today are through Facebook, Reddit, bulletin board style forums, and other such mediums.

Our goal is to introduce a way to bring this discussion directly to where the content is at: a web page. Being able to open a web page and immediately jump into a discussion through our extension will allow users to find and contribute relevant information quickly. The idea that information should be freely accessible runs deep within the ideology of the internet. Often, this leads into a rabbit-hole effect of finding more about the topic at hand. Comment Anywhere strives to bring the discussion directly to the content.

2 Objectives

2.1 Browser Extensions

The basis of Comment Anywhere are the browser extensions. We aim to support popular internet browsers, such as Google Chrome and Mozilla Firefox.

2.2 Crowd Sourced Moderation

We aim to bring two methods of user moderation to the platform:

1. User Ratings - Similar to Likes or Upvotes, users should be able to rate the relevancy of a comment. Higher rated comments rise to the top.
2. User Reports - Comments that are off topic, violate community guidelines or standards, or contain offensive material can be reported for manual moderation.

Comment Anywhere Users with good standing and history will be asked to participate in Moderation, as a Community Volunteer. These select users will be able to access a Moderation section where they can review reported comments for rulebreaking behavior.

2.3 Automated Moderation

Some comments should be subject to moderation guidelines at the time of submission. Sentiment Analysis, keyword searches, and machine learning can all be applied to analyze comments upon submission to find rule breaking behavior.

2.4 Backend Services

Comment Anywhere will rely on a number of backend services including:

- Comment Database and API
- Comment Analysis and Moderation
- User Information
- Moderation and Administration Services

3 Implementation Techniques

3.1 Browser Extensions

JavaScript is the de facto language of the web today. Extensions for browsers utilize the same technology stack.

Google Chrome, Mozilla Firefox, and other popular browsers each publish their own tools for developing and testing extensions. The WebExtension Polyfill library should help eliminate duplicate code between each platform.

3.2 Backend Services

A number of Implementation options exist for the backend services:

- Golang
- C#, ASP.NET
- Java, Spring
- Python, Django/Flask
- Javascript/Typescript, Node.JS

A relational database is likely to fit best, such as PostgreSQL.
Analysis of the pros and cons of each technology stack is ongoing.

3.3 Project Homepage

A homepage detailing information about the project will utilize a simple stack to present a static web page.

4 Potential Users

Comment Anywhere is aimed at being accessible to all people. Information is a crowd sourced effort.

5 Features, Deliverables

5.1 Browser Extensions

An platform specific extension for each Browser that populates comment data from the backend. The extension is the user interface for the product, and supports:

- Parent-Child comment relationships
- Comment Ratings
- Comment Reporting tools
- Moderation Tools

5.2 Comment Database and API

A collection of backend services supporting the submission and retrieval of comments.

5.2.1 Automated Moderation

A backend service that analyzes comments upon submission to ensure they match guidelines.

5.3 Project Homepage

A static webpage detailing the project.