Project Detailed Presentation

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Table of Contents

Problem Description

What's a Spoiler really?

A spoiler is an element of disseminated information that reveals the plot of a movie, book, series, play, or any other media or literature (*Source: Oxford English Dictionary*).

Need to bust spoilers!

Spoilers *spoil* the fun and the thrill by revealing the climax that the potential consumer was not intended to know. It's like reading the last chapter of Agatha Christie novel soon after you buy it.

Internet is full of spoilers and we must be able to control whether we to reveal/hide the suspense.

Solution Description

Spoiler Buster is a browser Extension that filters out search result and text on web pages that "spoil" or reveal plot elements of the media.

Algorithm

- When the user searches about any shows/movies, spoiler texts are first spotted by the ML algorithm.
- These spoiler texts are either blocked or replaced with colors, images and gifs.

Extension

- User can customize the spoiler keywords he wants the algorithm to concentrate on.
- User can choose the movies for which he wants to block spoilers.
- User can also choose the color, image or gif to replace the spoiler text with.

Project Scope

The main goal of the project is to develop a google chrome extension which can filter spoilers from an open webpage by using a machine learning model to detect spoilers text extracts.

In-scope deliverables

- A chrome extension with a simple user interface.
- Acquire, clean and prepare the data for training the machine learning algorithm.
- Design, build and deploy the machine learning algorithm to successfully classify the spoiler from a text extract.
- Create a prototype by integrating the machine learning model to the browser extension.

Out-of-scope deliverables

- Gaining users for the extension.
- Data collection for model training.

Technologies to be Used

- Python
- Machine learning libraries : Scikit-learn, TensorFlow
- HTML/CSS/JavaScript for building the browser extension
- Google cloud platform
- Git and GitHub for code management and version control.

Google Cloud

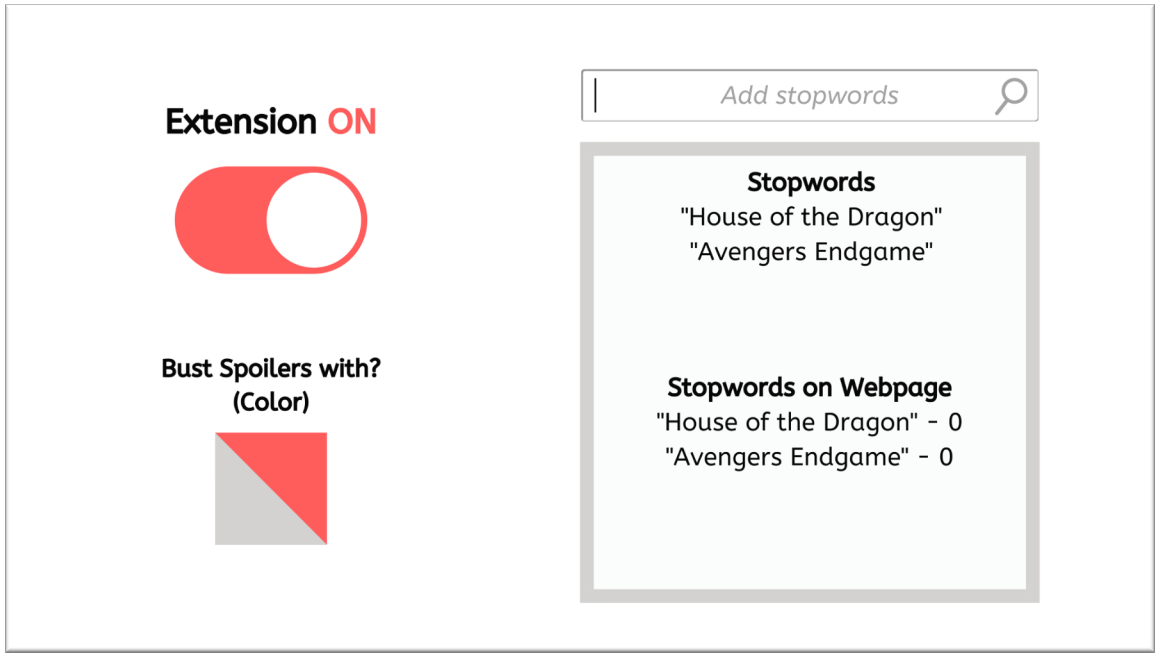
Cloud Natural Language

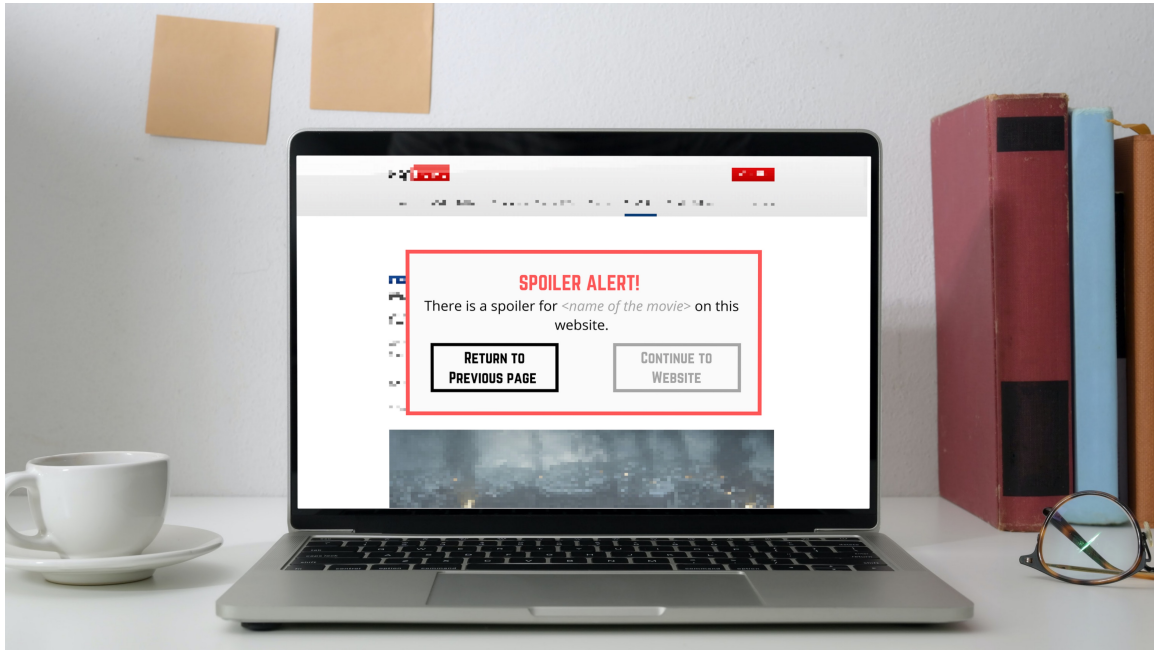
TensorFlow

Extension Version 1

Expectations

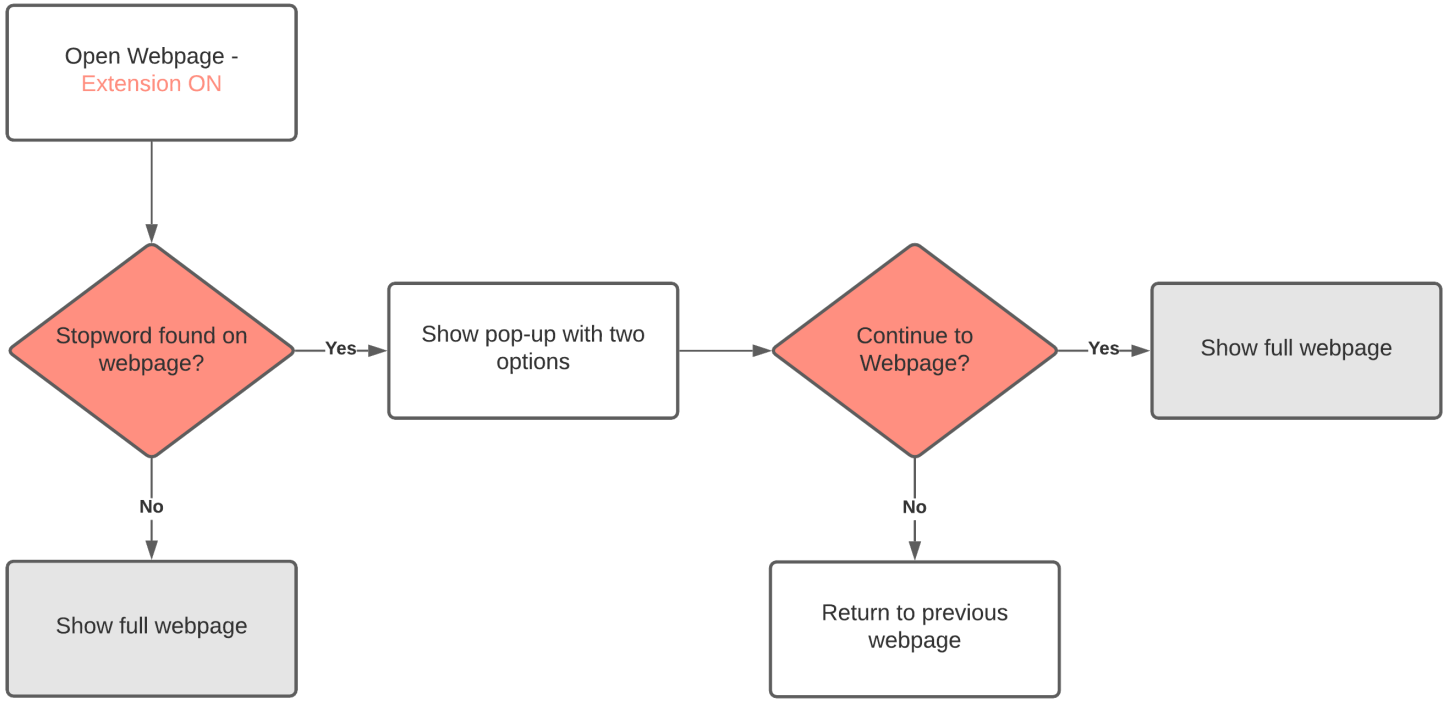
- Input ‘stopwords’ (movie names, character names, etc.).
- Get an alert when visiting a website that contains the ‘stopwords’





Algorithm Version 1

Expectations



Final Version

Project Evaluation

The goal is to create a Chrome web browser extension that works in a similar way to Spoiler Protection 2.0.

Expected features

- Ability to selected from a pre-defined list of movies. If the desired movie option does not exist, add name of the movie manually.
- Ability to switch between three modes:
    1. Extension OFF – Do not hide any spoilers.
    2. Hidden Mode – hide specific parts of a webpage.
    3. Pop-up Mode – have a pop-up appear when visiting a webpage with spoilers.
- Option to select a background color to hide spoilers (only in Hidden Mode).

Project acceptance criteria

- Successful development of chrome extension to block spoiler text.
- Successful development of machine learning model to classify spoiler text.

Project Assumptions & Constraints

Assumptions

- Development of the solution is possible in the timeline defined.
- Integrating the chrome extension with the ML algorithm is possible and does not involve using paid services.

Constraints

- No Budget for the project ($0)
- Product delivery deadline: December 15, 2021 (about two months from

Project Milestones & Schedule

spoiler buster

ID	Milestone Title	Expected Duration (days)	Target Complete Date	Deliverables
Phase I: Planning & Initialization				
1.1	Project Plan	10	10/06/2021	Project Detailed Presentation
1.2	Extension – V1	5	10/16/2021	Chrome Extension
1.3	Algorithm – V1	10	10/25/2021	Baseline Model
1.4	MVP (Minimum viable product)	10	11/03/2021	Functional Prototype (20% complete)
Phase II: Solution Development & Testing				
2.1	Extension – V2	10	11/10/2021	Updated Chrome Extension
2.2	Algorithm – V2	15	11/20/2021	Model Integrated with Extension
2.3	MMP (Minimum Marketable product)	5	11/24/2021	Real Product (75% complete)
Phase III: Implementation & Project Close-out				
3.1	Product Launch	10	12/08/2021	Complete Product (100% features)
3.2	Final Presentation	5	12/15/2021	Formal Product Presentation and Review

Thank you!

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