School of Computing  
CA326 Year 3 Project Proposal Form

Project Title: Spoiler Alert

# Students and Supervisor

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# Project Description

Our project idea is for a Google Chrome Extension that will in essence act as a “Spoiler Blocker”, parsing the HTML of every web page that is visited by the user on Google Chrome, determining if any part(s) of the web page contain information about a movie or television programme that the user has specified and subsequently replacing this information with a warning that will inform the user that the underlying section of the web page may contain a spoiler.

For the purpose of the project, our product will be limited to specifically targeting spoilers for the Marvel Cinematic Universe (MCU) and for the popular television series, Game of Thrones (GoT), to primarily act as a proof-of-concept for a completely open spoiler blocker that would allow users to specify any shows and movies they do not wish to see spoilers for. We would use the existing online IMDb database tocreate and query our own SQL database with information regarding character names, place names and other relevant information about the MCU or GoT which we can then incorporate into our html parsing and help determine whether a segment of the page contains a spoiler. When we have all html elements that contain this sensitive information from IMDB, we can then begin determining if those particular elements contain spoilers and appropriately block them. In addition, we initially will focus on a single website (likely joe.ie) to begin our project and later expand towards Facebook or Twitter where spoilers would be more common, with the possibility of incorporating a generic blocker that will work across any website.

This project requires us to utilize a wide range of tools and languages to accomplish this**,** including the languages listed below, but also incorporate html parsing, sentiment analysis, database creation and manipulation, and modifying HTML & CSS. The nature of determining what exactly is a spoiler is also very subjective and would require an amount of discussion between both group members to develop a set of specific rules for our algorithm.

# Programming Languages

* HTML
* CSS
* JavaScript
* Python
* SQL

# Programming Tools

* SQL Database (likely hosted on our own server)
* Google Chrome DevTools and Debugger

# Learning Challenges

* Accurate sentiment analysis to determine whether or not something constitutes a spoiler or not.
* Learning the language of JavaScript and how to use it to accomplish the project goals.
* Setting up and subsequently using a SQL database based on the existing online IMDb database.
* Creating, packaging, deploying and updating extensions for Google Chrome.

# Hardware/Software Platform

Our project will be web-based and will therefore be available for use on all operating systems on which Google Chrome may be installed. We will primarily be using Windows PC’s to develop the project.

# Special Hardware/Software Requirements

None.