**Auto Reviews Website**

Functional Specification

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**Background & Overview**

This **Auto Reviews** website provides consumers with information about features, specifications and our opinions of new MY cars in the US market.

This document is a currently in **DRAFT** form. Much of this document is subject to change to meet the needs of the client about features and revisions that need to be made. In no way is this document all-inclusive as features may be added or removed during the development phase of this project. This is meant to outline the UX of the user on the site, this is not meant to be a technical specification though it may include some technical references.

The features needed for this site includes multiple database tables which include but are not limited to:

* Users
* Reviews
* Auto Manufacturers
  + Make
  + Model
* Comments

**The database tables will be explained in further detail later in this document.**

**Scenarios**

**Joe the Car Enthusiast**

Joe the Muscle Car Man loves to see videos related to the Auto Industry. Joe wants to know more about the 2016 Dodge Charger R/T. He visits this site because he knows this is a premiere location on the web to find out more about a variety of cars on the market. Joe enters the site and is greeted with a list of most recent videos on the home page. This is the first thing you notice. Secondary to the videos is a sidebar with most commented videos on a popular list for the site. Joe really likes to comment on videos he likes on the site, and has quite the record at 248 comments total and is a regular visitor to the site. He has a username and password to login and post comments as well being able to see any premium content that is published to the site.

Joe searches for the make and model of the car he wants to see the review for. He is pleased when he sees we have just posted the 2016 Dodge Charger R/T and clicks the title link just above the actual video embed to go to the review page for that review to find extra tidbits of information that is written about the vehicle that may not have made it into the video review. He can also see the list of comments for that related review at the bottom of the page, as well as a text box to fill in his own comment(s). Once he finishes posting a comment he clicks the videos link at the top of the page to go find more recent videos to see if there’s any other cars he wants to see the review for.

**Dan the Content Creator**

Dan is the site’s content creator. He creates videos and written content to upload to the site for the sites users. To post content he must login to the site using his administrator credentials. As an administrator on the site he has the ability to make changes to user information, review content (past and current), review and edit comments.

Dan’s main role will be to add new review posts to the sites database through a “Post” link. The post link allows him to add all necessary fields to complete a standard review post.

Automatically generated post information:

* User\_id\*
* Username\*
* Avatar\*
* Review\_id\*
* Published\_time\*
* Updated\_time\*

User generated post information:

* Title\*
* YouTube link to video content\*
* Image links (if used)
* Review\_content text\*

**Items marked with (\*) are required to submit a new post**

When Dan fills in all required fields he clicks the “Submit” button to push the information into the database. Once complete, the review post will be displayed on the browser so he can see if there are any changes that must be made (updates) to the post. The content is now live and properly formatted based on current site CSS rules.

**Becky the Car Buyer**

This potential car buyer has made it to our site because a search engine query has brought her here and she will not register to be a user of the site. She is looking for a new 4-door vehicle and notices we have a way to search for cars based on vehicle type, make, model or year. She selects “4-door sedan” from the list. She found one or more of the vehicles she is considering in our list of reviews. She doesn’t want to spend much time on one page because she wants information quick so she can make her decision faster.

When she clicks on the Audi A4 review post link, a page displaying the review post loads.

This is what she will see:

* Title
* Published/Updated time
* Embedded YouTube video
* Image Thumbnails
* Text review
* Comments (although she cannot post any)

Typically this user will watch the video review, absorb any useful information, and then leave the site when they have no more content to benefit from. More content helps this user stay on the site longer.

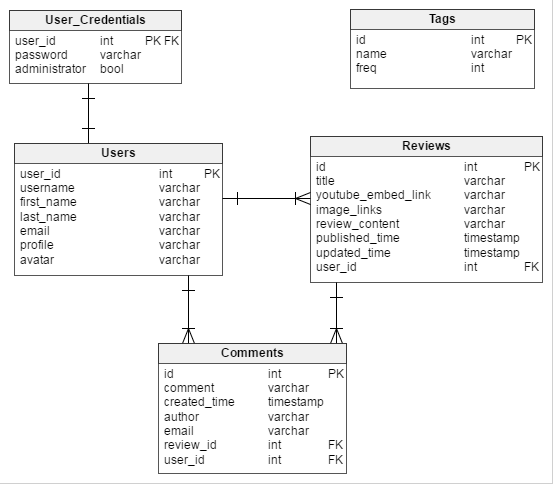
**Data Needs**

There are some data requirements that need to be fulfilled in order to provide visitors with enhanced content delivery.

**Database**

The following schema is not complete. TAGS have been removed from the project.

This database schema shows the relationships between users and review content and supporting tables. The database fulfills some basic needs for functionality of the site.



**Storage**

As this site relies heavily on delivering video content, the site must utilize cloud based storage to host the data. Our aim is to keep costs as low as possible for this step. Our largest files are videos and most of our users will request our videos rather than reading our text-based reviews. This content must be deliverable 24/7 without interruption. Storing this data off-site in the cloud is the most cost effective way of providing content to our users.

YouTube is the selected CDN host for this site as the upload limits are as follows:

15 minutes is the default max length, but that can be extended by visiting https://www.youtube.com/verify. The webpage says to make sure you're using an 'up-to-date' version of your browser to upload files over20GB. The current (as of Feb 2, 2016) maximum file size is 128GB and the maximum duration is 11 hours.

**Hosting**

This website is hosted off-site and will require a monthly service fee. The current amount of throughput and requests to the site do not warrant on-site servers for web host, data storage or LAN connection speeds.

**Users**

There will be a user database for people that want to contribute comments or administer the site. Users will be required to login to post comments.

**Reviews**

Reviews on the site consist of a title, a YouTube embed link to the actual video, any links to images related to the review, the review text and published timestamp.

YouTube.com: All videos will be hosted on youtube.com as a content provider / cloud storage provider.

**Comments**

Comments play a large role in determining a videos popularity on the site. When a user posts a comment, that review gains a point in an imaginary point system. Each point a review receives helps push the review up on an all-time popularity list which is visible on the home page on the sidebar. Users will feel special when they are required to login to the site to be able to post their opinions in the comments section.

**Administrator / Content Creation**

An administrator section is required for site users with admin access to post new video reviews. This is an important section because we want to be able to easily add content references in the database for new content / posts.

When logging in, administrator rights will be determined through the database. The user can then see a new navigation tab named “New Review”. They will then be able to fill out a neat little form that asks them for required input such as the title, video embed url and the text content.

**Accessibility & Usability**

**Accessibility**

Our goal is to help provide a rich experience for all users, including those limited by hearing, sight or other impairments. Because our site delivers both written and video forms of content, it will be able to be developed to accommodate a user for accessibility needs.

We will implement many of the Web Content Accessibility Guidelines (WCAG) developed by the World Wide Web Consortium (W3C).

This is a summary of topics we will consider when developing the site:

**Perceivable**

* Provide [text alternatives](http://www.w3.org/WAI/WCAG20/quickref/#text-equiv) for non-text content.
* Provide [captions and other alternatives](http://www.w3.org/WAI/WCAG20/quickref/#media-equiv) for multimedia.
* Create content that can be [presented in different ways](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#content-structure-separation),  
  including by assistive technologies, without losing meaning.
* Make it easier for users to [see and hear content](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#visual-audio-contrast).

**Operable**

* Make all functionality available from a [keyboard](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#keyboard-operation).
* Give users [enough time](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#time-limits) to read and use content.
* Do not use content that causes [seizures](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#seizure).
* Help users [navigate and find content](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#navigation-mechanisms).

**Understandable**

* Make text [readable and understandable](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#meaning).
* Make content appear and operate in [predictable](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#consistent-behavior) ways.
* Help users [avoid and correct mistakes](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#minimize-error).

**Robust**

* Maximize[compatibility](http://www.w3.org/WAI/WCAG20/quickref/Overview.php#ensure-compat) with current and future user tools.

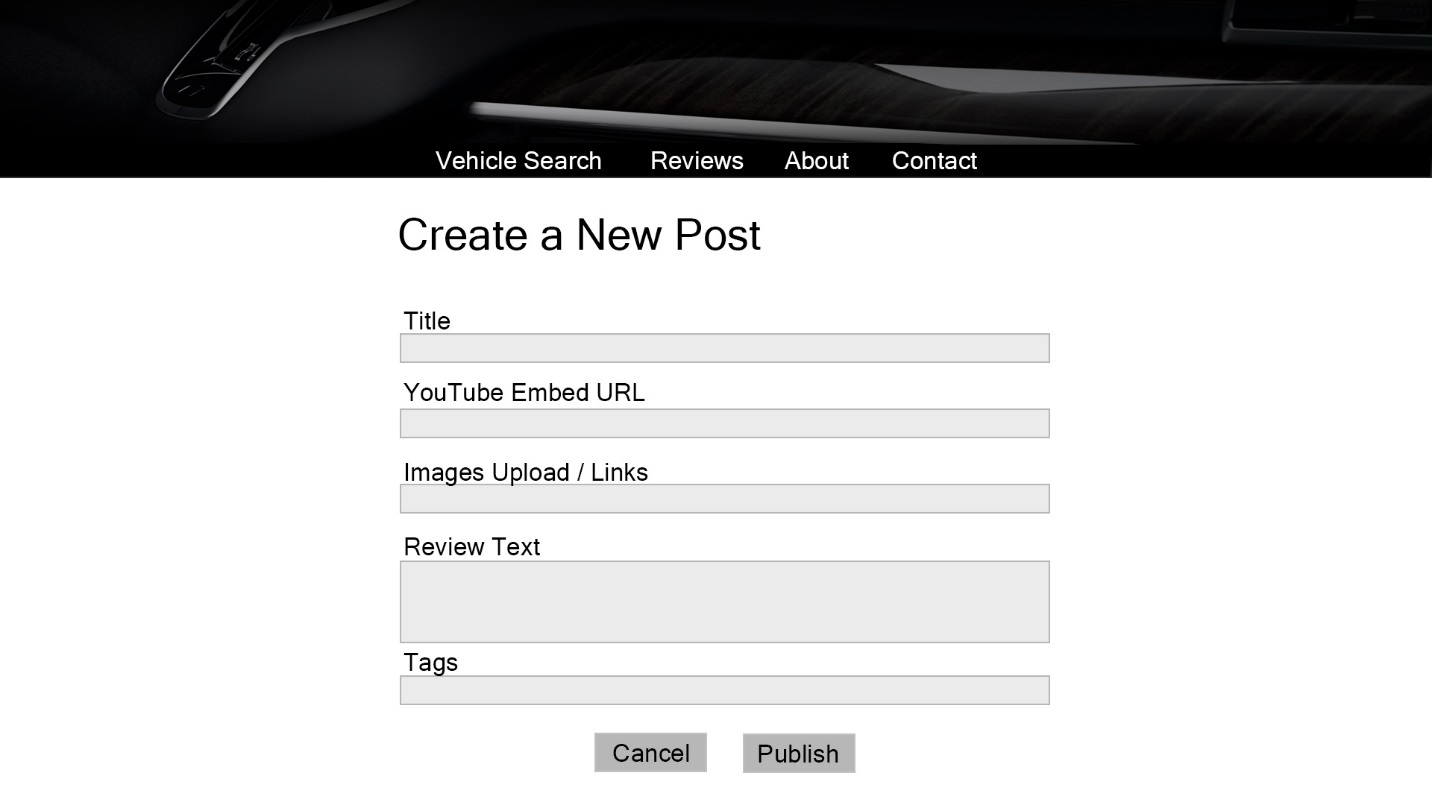
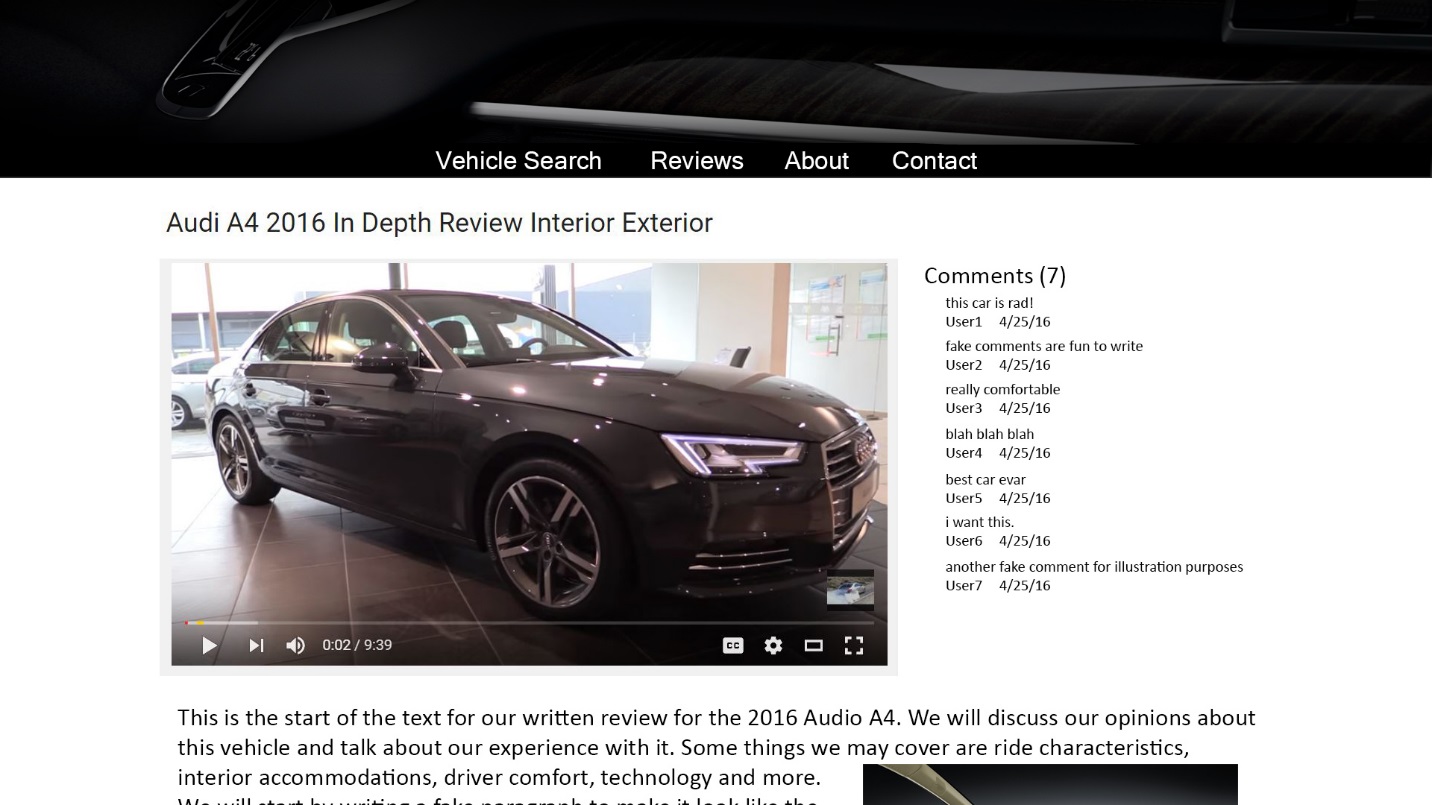
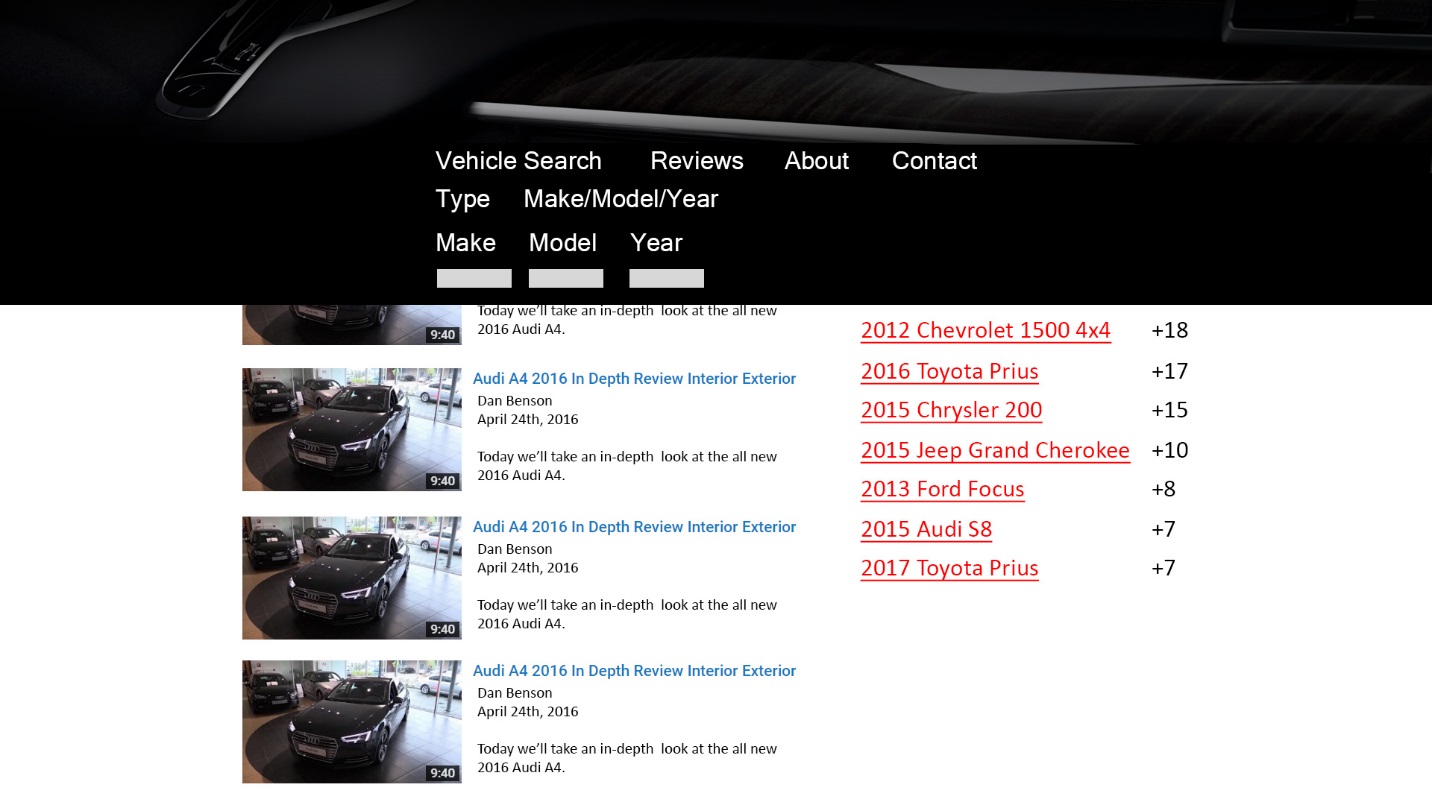
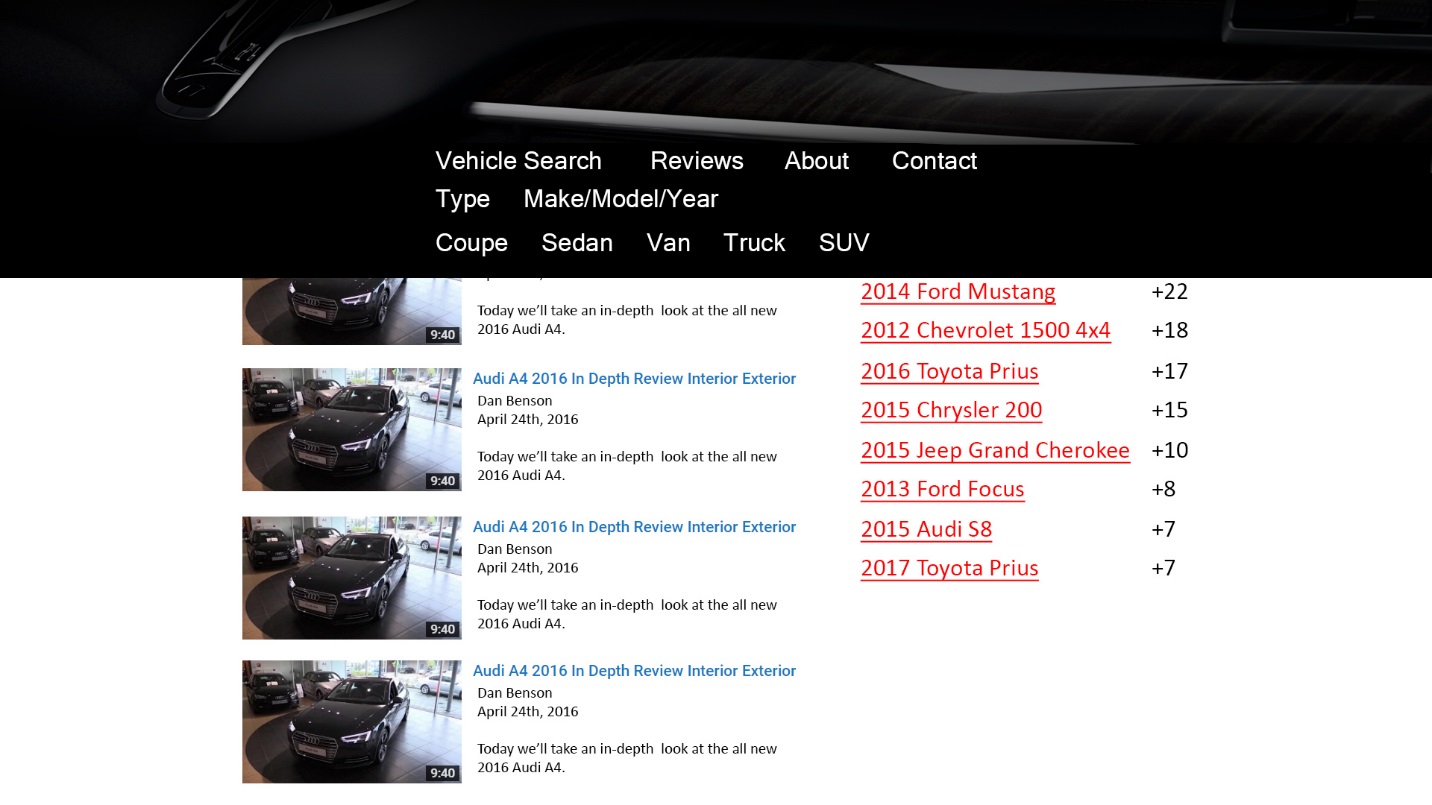
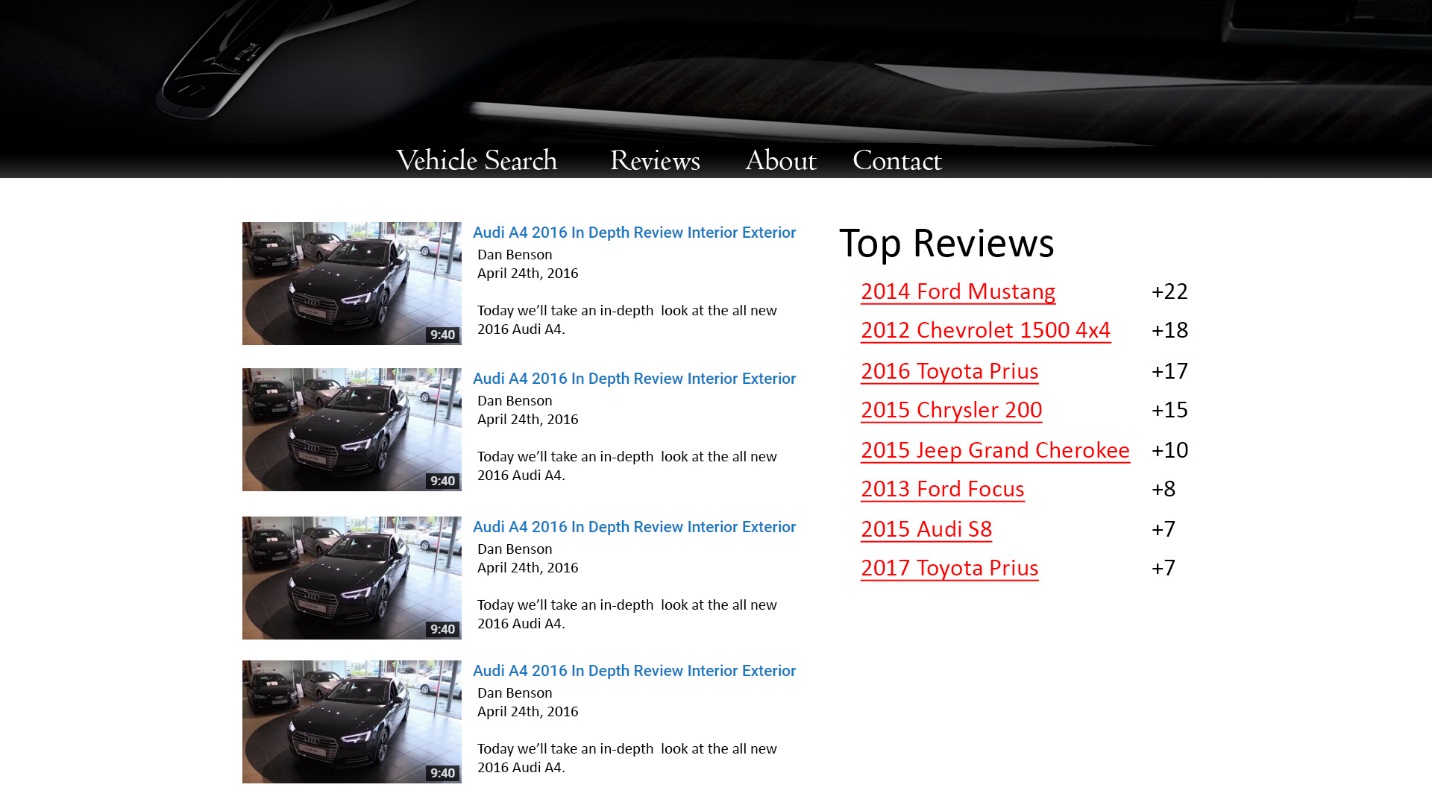
**Usability**

Usability on this site will be enhanced by using a graphic-heavy design aspect. The main design / user interface of the site should be simple and easy to navigate. The content we provide is useless unless visitors can quickly find the information they want.

By using images instead of dropdowns, long menu lists and large blocks of text, users can quickly navigate and decipher our search functions more easily. This will minimize the use of the ever popular “back” button.

**Wireframe / Mockup**

The following images represent the basic design aspects of the main pages of the site.

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