**Background**

DCS or “Digital Combat Simulator” Is a video-game simulator made with the intent to be as true to life as possible. The game uses real life information to detail its maps and vehicles. In the game, players have the option to choose between several planes that exist in the game. Each server on DCS varies in what happens, some may be a re-creation of the cold war from the early 80’s where people on both sides attack objectives to win or some servers might be hosting one-on-one fights.

The DCS Compendium is for players who want to learn about the game and learn how to defeat enemies they come across as they actively play in Digital Combat Simulator (DCS). DCS is known for its hyper-realistic models, gameplay, and features. While DCS is great in many aspects, many new players complain about the difficulty when just starting. Often, new players feel helpless against enemies due to limited knowledge provided by the game, the compendium helps to fix that problem by featuring quick and easy to access information with explicit details on how to counter that enemy, which nothing else does as fast and well as the DCS Compendium does. DCS features nearly a hundred vehicles, and, for the average person, it would take years to understand what all of them do, the DCS Compendium hopes to make it easier for any player to quickly lookup what something does. As an example, a player may be in a plane and spot an Anti-Air system on the map called a “SA-9”. A knowledgeable player would know one can avoid an SA-9’s missiles by using flares and then taking it out, but an inexperienced player may avoid it at all costs due to lack of knowledge potentially leading to friendlies being shot down. Inside DCS, the game offers little in terms of short-term on-the-go learning, DCS often prefers a long-term approach by learning by taking possible 10+ minutes to teach, while some people enjoy this approach a lot of people may not. Therefore, the DCS Compendium will have several features that make it easy for anyone to navigate the program regardless of computer literacy and the clickable interface will allow faster traversal through the program in case someone doesn’t have spare time to type.

**Benefits**

The DCS Compendium will make it easier to gain access to key info for several vehicles in DCS. People using the DCS Compendium will find it quick to get the information they want, rather than spending time googling an answer and only getting a sub-par result. The knowledge provided in the DCS Compendium is also up to date with knowledge from a seasoned user. The DCS Compendium helps users save time with quick decisions, as an example, a player has rockets on their plane, and they are trying to figure out which of the 3 tanks in a group can be destroyed/penetrated by the rockets based off of the tank names. A couple other benefits are that since this is a small application, the data is loaded fast compared to sluggish websites, also, the app is much easier to navigate to when needed compared to having to look through several browser tabs.

**Key Features**

* Create/Read/Update/Delete entries in The DCS Compendium database
* Search by key functions (name, group, unit, etc.)
* Sort through entries using buttons
* Get data (specifications, description, use, etc.) for each entry
* Password required for database features

**Comparison with similar apps**

Fandom Wiki, Gamepedia and Hoggitworld Wiki are all apps similar to, what will be, the DCS Compendium. There are no apps that directly imitate what is being made, but they are similar in some respects. For example, Hoggitworld wiki provides a lot of data such as learning to fly and techniques that The DCS Compendium will also likely integrate. The DCS Compendium will be quite different from these, instead of being a wiki web page where one clicks links and reads from a single page, The DCS Compendium app will have a user-friendly approach; By using buttons and having optional search boxes, it will allow easy traversal for those who may not be as tech literate as other people.

**Design Ideas**

I want the app to fit in a rectangle box. The start of the app will be a form with a DCS background Image that says “DCS” and there will be search bar and buttons around it. Below it will be three buttons with Air, Ground, and Navy split between each. There is also going to be a textbox in the top left to search for specific tags. When the button is clicked, it will close the main screen form and open the search query form, depending on if the search button or the air/ground/naval buttons are clicked it will show the results for that term (ex: Air button will show results for all vehicles in the “Air” class). When you click on the image of a result in the search query, it will open a form that provides more information such as description and weakness. Going back to the main screen, it will have three buttons for CRUD features. Since read is already provided by the search query, it will do create, update, and delete features. Each of these features are locked behind an admin login panel which, depending on which button was clicked before, will navigate you to the corresponding form when you enter the right password. The create new entry form allows you to upload an image from your pc without needing to do anything advanced to get it added to the database. For the updating feature, it provides a step-by-step guide to updating an entry. For the deleting feature, it is as simple as finding the entry, and then clicking delete when you find the correct one. For any errors or mis-inputs they are handled with a message box when catching the exception. For each form that it makes sense on, they have a back button to go to the main screen.

**Example of Similar Design** (from armadainternational.com)

A tan tank on a dirt road with trees in the background

Description automatically generated

**Starting Design Idea (also check wireframe in the GitHub for a more detailed idea)**

A screenshot of a computer

Description automatically generated

**Approval Signatures**

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| --- |
| Hayden Sexton |
| [Name], Student | |  | [Name], Instructor |