Project Report

# ITCS210 - Web Programming - 2016 Section.1C:\Users\NutNNut\AppData\Local\Microsoft\Windows\INetCacheContent.Word\LOGO2.png

# Members

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# Web Accessibility Concerns

Our webpage is easy to use and navigate. Anyone can use our webpage to learn English words through pictures and descriptions.

People with hearing deficiencies can use our site without any problem because our game does not require use of audio, only through picture. People who have minor eye problem can still navigate at ease because we use simple design with big buttons and easy to understand method of navigation. Blind people however, are not supported.

# Client-Side – HTML, HTML5, CSS, CSS3, Bootstrap, JS, jQuery

* HTML is the basic of web programming and is used on all of our pages for contents and structures.
* HTML5 is used to verify the validity of sign-in and login information. It is also used to make some buttons.
* CSS is used to decorate and position many elements in most of our web pages including the animations.
* CSS3 is used in some animations such as fade in and fade out
* Bootstrap allow our webpage to have different layouts for use on difference devices or platforms to maximize the experience the user will get on depending on screen sizes.
* JS – Most of our pages make use of AngularJS, ranging from showing cards and decks retrieved from Database, to many animations such as progress bar and card flipping. Saving progress on each deck and many game related functions are also written in Angular JS.
* jQuery is used for dynamic looking of pages and contents such as the pop-up deck information windows when a deck is clicked.

# Server-Side - PHP

PHP is used in our webpage for many essential functions. It is used together with JavaScript to access the database and retrieve decks and cards information. It is used to validate and process sign in, login, and logout requests. Users can also add their own decks and cards, in which PHP is used in the process of uploading and updating our database.

# Database

Database is used to store many kind of information in our webpage including Cards, Decks, Scores, Rating, Users, and image paths. For ER Diagram, please check ERDiagram.pdf.

Each user will have exactly one row in the “**users**” table. The table will store the user’s name, password, and email. A user can have many progress on different decks and a deck also can be played by many users.

The table “**progress**” is created to create M-N relationship between users and deck and also store the progress the user have made.

The table “**deck**” contains all the decks’ name, description, its creator, and the path for cover image. Each deck may contain many cards in it.

the table “**card**” is used to store the word and the description of the card as well as the deck it belongs to. A card can only belong to one deck. The path to the card’s image is also stored to make retrieval of its image possible through JavaScript and PHP.