Green is me

**Main content of report  
Cover page**With student name(s), department name, Saint Martin’s name and logo, and date **Abstract/Summary**

This should summarize the objectives of your project and how they were accomplished in one or two paragraphs. Do not confuse this with an introduction which sets the background for the project. The abstract is a very important part of the report because people often will decide on whether to read the rest of the report based on what they read in this section. Although it comes first in the report, it is often written last so the authors can be sure of what is written in the report before summarizing it.

**Introduction**

Give a brief introduction about your project, such as:

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* ⮚ Define the problem that you are solving with your software
* ⮚ Describe the scope of your solution
* ⮚ Describe the environment under which your system functions
* ⮚ State why you chose this project
* ⮚ Which students worked on which part(s) of the project, if applicable; and references to anyone else that helped, or other organizations that were engaged.

Kendra worked on the website code with some group troubleshooting of the code, she built the pages, the links, and the search function. I made a xampp file for php insertion into the HTML code; she took that file and with pair programming we linked the database to the search function. I worked on the database code(s) with some troubleshooting assistance from Google and a call to an outside resource for the php hurdle we hit when connecting the database built in SQL via Visual Studios 2017 to the website built in HTML via Notepad++ and Chrome. Group meetings focused on communication, brainstorming, and troubleshooting any issues we were individually stuck on as a group. Each member contributed a number of recipes that we each wanted to share on the site, focusing on countries’ traditional foods or a collection of breads found the world ‘round. The design phase involved all continuing members and all changes to the design and scope of the project was discussed and agreed upon by all continuing members as well. The minimalist design was a response to the over-crowded recipe sites that exist now. The hero-image at the top of our main page with the search function and text on top of the image were adopted from Epicurious.com. Jordan assisted Kendra with creating some individual pages for the recipes, he took the lead in creating each power point, and he explored the idea of adding a comments section, which was slated for a future feature in a later group meeting. Jordan also took the lead in our oral presentations with alacrity. He also found our client and was the key communicator with her throughout the semester and he will take the lead on the website after the semester ends.

**Literature Review**

Give a brief summary of the systems similar to your system. In addition, choose one or several system(s) that have been available on the market and compare to your system. In the comparison, if you have any original contribution, mention it here.

**Design Methodology and Design**

Discuss your design method and your system architecture. In addition, discuss how you solve the problems encountered in your design. In this section, you should cover some or all of the following topics:

⮚Requirements

* ◼ Summarize the functional requirements such as
  + ◆ Inputs and outputs
  + ◆ Database requirements
  + ◆ Communication, Network, Internet considerations
  + ◆ Interface with other systems
  + ◆ Human factors (user interface)
* ◼ Summarize the non-functional requirements, such as
  + ◆ Constraints: Managerial, Resource, Environmental
  + ◆ How are they implemented in your system
* ⮚ Use cases  
  ◼For each use case, you can add the information, such as
  + ◆ Who are the actors (users, customers, managers, data entry people, etc.)
  + ◆ Describe how they interact with the system
  + ◆ What part of the system does each use or interact with
* ⮚ Physical System

◼Describe the physical system your software will work on, such as:

* ◆ Describe how your system is laid out physically.
* ◆ What software and hardware are you using to create the system
* ◆ What software (functionality) did you create

⮚User Interface  
◼Describe how to design the interface, such as

* ◆ Show and describe the Storyboard or screen shots of each user interface screen
* ◆ Describe what each page does and how it navigates to and from other pages
* ◆ Describe which actors use which pages

⮚Database  
◼If your system will work with a database, give an introduction to the database, such as

* ◆ Discuss how you organized your database tables
* I chose to build the database in SQL using Visual Studio 2017 as my complier. Once I had created the recipe database, I initially attempted separate tables for the recipes and the ingredients, similar to recipe database coding I found during research, but this proved troublesome and created additional problems within the code. I then attempted to integrate the ingredients table contents into the recipe table but hit a wall with an “invalid column name” error. The solution to this problem was to rewrite the database creation code with more complex column names and all information contained within one single table. This was feasible within the project’s scope and fit the smaller, more personal nature of our site and, more importantly, it worked. The next hurdle was the php link between the SQL server and the website we built. The site wasn’t hosted yet and this led to some additional errors and confusion on my part. The group was involved in troubleshooting these hurdles; contributing their insight and utilizing their skills in html, php, and XAMPP. The reduced number of tables reduced the possible errors, simplifying the code and fixing the errors other troubleshooting attempts failed to.
* The experience I gained from this project was rounded out by each hurdle and solution, pushing me to expand my knowledge and abilities to fit the needs of the project.
* ◆ Discuss how the tables interact with the system and with the user interface
* The small scope of the client’s needs led our design at every step, with an emphasis on minimalism, and this extended to the database. A single table filled by manual input is sufficient for the little website we made, containing stripped down versions of the recipes we brought. Every recipe is saved with credit to the owner/website, with an eye for sharing within the client’s immediate social circle and not trying to replace recipe website giants like recipes.com and the food network. Further expansion would be at the client’s behest and does not lie within our current project scope. The database is linked to the search bar on our front page so that users could search the recipes in our database by ingredient. The search function is cursory and only searches our database of hand-picked recipes from various corners of the world.
* ◆ Use the Data Flow Diagrams to illustrate your system

Search parameters entered

User

Website HTML code

Search query sent

SQL Database

Query created with search parameters

Recipes Table

Query result(s)

Query results returned

Search results displayed

php code

Search parameters entered

Search results returned

* ◆ Use the ERD to illustrate your system

websiteRecipesDatabase

|  |
| --- |
| recipes |
| recipe\_id |
| recipe\_title |
| recipe\_country |
| recipe\_description |
| recipe\_source |
| recipe\_link |
| recipe\_ingredients |
| recipe\_instructions |

PhpMyAdmin

|  |
| --- |
| recipes |
| recipe\_id |
| recipe\_title |
| recipe\_country |
| recipe\_description |
| recipe\_source |
| recipe\_link |
| recipe\_ingredients |
| recipe\_instructions |

Transferred the database code to phpMyAdmin. PhpMyAdmin now holds the SQL database

⮚System Interaction  
◼Describe how your user interface interacts with your data base

**Implementation**

Discuss how to implement your design, such as development methods, tools, programming language. In addition, discuss how your solve the problems encountered in your implementation. In this section, you should cover some or all of the following topics:

⮚What development method you use to write the code and other development work ⮚Testing, such as

* ◼ Describe your Test Plan

Trial and error

* ◼ Present the Test Results
* When I first attempted to build the database, I ran into “invalid column name” error and could not shake it, no matter the modifications to the database and its tables. I had initially started with 10 recipes, 2 tables, and simple names. I created a database with 2 tables but found the extra table unnecessary and built only one recipe table containing all of the desired information. By starting from scratch, I was able to avoid the naming errors with more complex and specific column and variable names to avoid any overlap with key words. At this point, all code has been sql using Visual Studio 2017, the database built with all of the recipes we chose to include. When attempting to connect the database to our website, we found a snag with an additional layer needed: php. Using XAMPP and phpMyAdmin, I recreated the database by modifying my existing sql code. Once built, saved, and tested the php database export file was created and inserted into the php code, which was inserted into Kendra’s HTML code.
* ◼ Describe what you learned or what you can conclude from the test results
* ◼ Describe what changes you made to your system as a result of your test results

⮚Completion Process

* ◼ Describe your actual week by week progress in completing the project
* ◼ Include your schedule and revised schedule(s)
* ◼ Describe how you met and/or why you didn’t meet your schedule and how you adjusted it
* Week 1: group created, project idea agreed upon
* Weeks 2-3: individual recipes, round 1, collected by each member
* Week 4: reexamined the layout and scope of the website, minimalist design agreed upon
* Week 8: demonstrated both starting database and website, each in the initial stages, and approved of the directions going forward, added more countries and recipes for each group member to produce
* Week 12: new database built with all recipes, website built (with scaffolding and aspects still to be decided or altered) with multiple pages and links already in place
* Week 13: more design changes, presentation created, modified and given
* Week 14: phpMyAdmin database built, group coding in php, html, and xampp to link the database to the search function on our website, the final report was sectioned out to each member according to each skill set
* Week 15: finishing up the website, testing links and search queries of the database through the website’s search function, finalizing the final report, and creating the power point presentation

**Experimental Result and Analysis**

Discuss how to employ experiments to test the performance of your implementation, including testing method, the purpose of each test. In addition, include sample experimental results and analyze the results, especially analyze if the performance of your implementation can work correctly and if any mistakes or problems that should be corrected.

**Conclusion and Future Work**

Summarize conclusions and results made in the project. Especially, summarize how well your design and implementation can meet its goals. Suggest any improvement as the future work. In this section, you should cover some or all of the following topics:

* ◼ Describe your expectations of your project and how you met or did not meet those expectations
* ◼ What did you learn from this project about creating a software project
* ◼ How would you do it differently next time
* ◼ What practices would you use next time **Reference**

List all resources and literature you used, checked, cited, or referred. Any references from your previous reports can be included.

**Appendices**

All figures, pictures, tables, plots, sample calculations, previous presentation slides, and so on which are not included in the main content of the report can be included here. These should all go in corresponding appendices at the end of the report.

In addition, each team member should submit a summary (at least ONE full-content page) describing what tasks he/she worked in the project and the result of each task in the report.