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ITWS 1100 - Intro to ITWS

Recipe Rendezvous: Final Project Write-up

The web application that we designed over the course of the semester was Recipe Rendezvous, a tool that allows users to generate recipes based on the meal they plan on preparing. The purpose is to attend to the needs of users who want to create fun, new recipes they have not seen before. Our plan was to build a simple interface that is easily accessible and understandable and to implement the recipe generator functionality. The inspiration for our project was that we wanted to create an accessible and user-friendly website that could allow users to easily select which recipes they want for which meals. There are always so many requirements and options to choose from when it comes to food choices and recipes, and thus we created a streamlined, easy recipe generator in case a user does not know which recipes they want exactly.

Our files were structured with the main pages in the root folder along with necessary CSS/Javascript files to support them. Further resources and data was stored in our images, resources, home, and documentation folders. The documentation folder holds our project mockup and README, the home folder contains static JSON file data to generate elements on the home page, and the images and resources folder contains the necessary items for the recipes page.

The interface of the homepage was designed using HTML, CSS, and jQuery. The initial inspiration of the homepage was taken from several websites that had similar functionality to our web application as well as some features from our own personal websites. We took inspiration for the navigation bar from our own websites and added additional styling with CSS to match the theme we were going for. Additionally, we added a description and welcome page for when the user lands on the website. This was to introduce the user to what our website functionality was, as well as drawing them in with captivating descriptions and uses. We also included an about the developers section which did provide some challenges on the side. In creating the developer sections, the spacing was mainly the issue and figuring out how to space it and resize appropriately. With some trial and error, the spacing evened out. Additionally, we included a show/hide feature using jQuery. This included the about us descriptions that were pulled from a JSON file that we manually entered. A challenge with this was pathing and making the “Show” turn into “Hide” once you clicked on it. Once we completed research on these features, we were able to implement them successfully onto our website. Additionally, we used HTML and CSS for the icons in that we included transitions to make the logos jump up once hovered over. Overall, we implemented interactive and dynamic features to our website in order to make the website more user-friendly and accessible.

The interface of the recipe page was designed using HTML, CSS, JavaScript, and JQuery. The inspiration behind this page was our initial idea for our mockup. We wanted to create buttons for selection based on user preferences and have one final button to generate the recipes, which would then be generated below everything on the same page. The recipe page was designed to match the style of the index page while completing its basic functionality. So, below the header and navigation bar, we have a section to select between breakfast, lunch, dinner, and dessert, and the option the user selected will be toggled so there is no confusion about which meal was selected. This was done using JavaScript and based on whichever meal is selected, the generate button will generate recipes based on whichever meal was toggled. We initially had lots of trouble trying to figure out how to develop the generate recipe button with JQuery but it was figured out and final changes were deployed before our presentation.

The final version of the information architecture for the recipes page changed significantly from what we originally planned. This was due to time constraints and being unable to fully achieve the complexity of our starting ideas. We settled on making sure our application could generate recipes in a meaningful and entertaining way. The recipes on our page were derived from an open source online database of recipes. A snippet of these recipes were put into static JSON files that corresponded to breakfast, lunch, dinner and dessert recipes. Using the jquery method AJAX to read the files, the recipe cards were built and displayed onto the page accordingly, varying in number and type. For any meal of the day, users could toggle the settings on our page and generate endless combinations of recipes.

Throughout the development process there were many challenges such as the extent of our personal knowledge and struggles with debugging. These issues were easily fixed through research on documentation for components and syntax for HTML, CSS, JSON files and Javascript. There were a lot of problems with file pathing and programming logic as the recipe generator was being created. Resources such as TA office hours were attended to receive further help and instruction on where to focus on and troubleshoot. The main challenge for us was narrowing down the complex scope of our project. We settled on an easier program that could be feasibly implemented in the time we were given and moved our original ideas to future plans for the project.

So in essence, throughout the course of the semester, our team embarked on the journey of developing Recipe Rendezvous, a web application that successfully alleviates the challenges associated with meal planning. We initially started out with a project that would have taken more time than we had during the semester, and thus we scaled our project down. This really helped in that we were able to focus more of the foundational parts of the project to build a strong base for future plans. So instead of rushing to complete a bigger project, we were able to focus on all aspects of what we planned to finish in full. Thus, our future plans can successfully take place if we already have a good foundation of our project. Moreover, the genesis of Recipe Rendezvous stemmed from our collective desire to create an accessible platform where users could effortlessly discover new and exciting recipes tailored to their preferences. Our vision for Recipe Rendezvous was clear from the outset: to craft a user-friendly interface coupled with a robust recipe generator functionality. We aimed to simplify the often daunting task of selecting recipes for various meals by providing a seamless browsing experience.

The development process began with careful consideration of the project's architecture and design. Structuring our files efficiently, we organized the main pages, CSS/JavaScript files, and resources into distinct folders to maintain clarity and accessibility. The homepage, meticulously designed using HTML, CSS, and jQuery, served as the gateway to Recipe Rendezvous. Drawing inspiration from existing websites and personal projects, we endeavored to strike a balance between simplicity and elegance.

The recipe interface, central to Recipe Rendezvous, underwent several iterations to meet our standards of functionality and usability. Leveraging static JSON files sourced from an open database, we employed AJAX to dynamically generate recipe cards based on user preferences. Despite facing constraints and debugging challenges, our team persevered, ultimately delivering a feature-rich recipe browsing experience.

As we reflect on our project journey, we recognize the immense potential for future enhancements and refinements. Our roadmap for Recipe Rendezvous includes Enhanced User Interface (UI) to incorporate modern design elements, animations, and responsive layouts to elevate the visual appeal and usability of the platform. We also want to expand recipe selection where we could introduce dietary preference options such as vegetarian, vegan, gluten-free, and keto-friendly recipes to cater to diverse user needs. We want to incorporate ingredient filtering and substitution to implement advanced filtering capabilities and offer ingredient substitution suggestions to empower users with flexibility and creativity in their cooking endeavors. We also want to include personalization and community engagement in order to introduce user accounts for personalized recipe recommendations, social sharing features, and community forums to foster engagement and collaboration. Finally, to ensure everything is compatible across different devices, we can conduct testing for compatibility to ensure seamless performance across various browsers, devices, and screen sizes.

One important thing we learned about was the importance of communication. We made sure everyone knew what we were doing and what we wanted to achieve. We had meetings where we shared ideas, talked about any problems we were having, and made decisions together. Being able to listen to each other and give feedback helped us stay on track and make better choices. We also learned that problems are bound to occur and it’s okay. When developing our website, there were times when we got stuck on something or things didn't go as planned. But instead of getting frustrated, we saw these challenges as learning opportunities. We attempted different solutions, asked for help when needed, and continued trying until we found a working solution. Another important lesson was taking into account the people using our website. We wanted Recipe Rendezvous to be user-friendly, so we put ourselves in the shoes of our users. We tested different designs and asked for feedback from others to see what worked and what didn't. Making changes based on this feedback made the website better for everyone. On the technical side, we picked up a bunch of new skills. We became familiar with HTML, CSS, and JavaScript, which are the basic building blocks for website development. We also learned how to add cool features like animations and dynamic content using tools like jQuery and AJAX. Lastly, we discovered that staying organized is key to getting things done. We used tools like task trackers (ex. GitHub issues) to keep track of what needed to be done and when. Breaking down big tasks into smaller ones made everything feel more manageable, and it helped us stay focused and meet our deadlines. In the end, Recipe Rendezvous wasn't just a website, it was a learning experience. We grew as individuals and as a team, and we're excited to take what we've learned and apply it to future projects.

In conclusion, Recipe Rendezvous represents our collective commitment to innovation and user-centric design in the realm of meal planning. As we embark on the next phase of development, we remain dedicated to refining and expanding Recipe Rendezvous to empower users worldwide in their culinary adventures. We’re excited to see the impact our website and our ideas can have on others, especially other culinary lovers.