Technical Specifications

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| **Project** | Menu Maker by Qwenta Project |

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| **Version** | **Author** | **Date** | **Approval** |
| 1.0 | Tracy Joyner | January 2025 | John, Qwenta |

The purpose of this document is to define and justify the technical specifications for Menu Maker by Qwenta Project.

1. **Technology Decisions**

* Overview of the functional requirements and their technical solutions:

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| **Requirement** | **Constraints** | **Solution** | **Description of the Solution** | **Supporting Arguments (2)** |
| *Landing Page (not logged in) – P1*  *Menu Style – P1*  *Dashboard – P2*  *Logout – P2* | *Must have banner, Customize Your Menu section, and Step-by-step instruction section.*  *It should be possible to view the menu currently being created and be able to edit the font/text color.*  *It should be possible to access “Create a Menu”, “Distribute a Menu”, “Print a Menu”, and “More Options” (which contains the last 3 blog posts about Menu Maker.*  *It should be possible to logout from any page.* | *React*  *https://react.dev/* | *The React library provides reusable components that can manage their own state, making it easier to create interactive and dynamic user interfaces.* | *React has the ability to allow instant user interface updates without reloading the page.*  *React is popular with an active developer community.* |
| *Login Page – P1*  *Dish Category – P1*  *Dish Creation – P1*  *Legal Notice and All Rights Reserved – P2* | *It should be possible to signup/login using an email address. A “Need help?” link should connect to the Qwenta team. An authentication email should be sent to users to confirm their email the first time.*  *It should be possible to create or select a category. Confirm the creation of a new category in its own modal.*  *It should be possible to select/edit a category. It should be possible to add new dishes (photo, name, price, description) in a modal.*  *It should be possible to read the legal notice in a modal window on every page. “All Rights Reserved” must appear on every page.* | *react-modal*  *https://www.npmjs.com/package/react-modal* | *The React library simplifies the creation of powerful, accessible modal windows with minimal coding.* | *React has been chosen for development. The library is consistent with this choice as it is the most commonly used library and the use of reusable components makes it easy to update.*  *React has an active developer community and it will be easy to hire developers with React experience.* |
| *Menu Maker Prices – P2* | *A new tab will open upon clicking on “Prices”*  *https://URL\_DE\_QWENTA/tarifs/menumaker* | *React router*  *https://www.geeksforgeeks.org/how-to-open-a-component-in-a-new-tab-in-reactjs/* | *React Router is a standard library for routing in React.* | *React Router enables the navigation among views of various components in a React Application, allows changing the browser URL, and keeps the UI in sync with the URL.*  *React is popular with an active developer community.* |
| *Previous Menus – P1*  *User Information – P2*  *Restauranteur Branding – P3* | *It should be possible to access previously created menus including creation date. It should be possible to edit/delete/create a new menu.*  *It should be possible to add and edit multiple email addresses including the default email address.*  *It should be possible to add/edit/delete a Logo and standard colors.* | *Mongo DB*  *https://www.mongodb.com/* | *MongoDB is used for high-volume data storage.* | *Mongo DB can store multiple menus, user information, and Restauranteur Branding as needed within its flexible database.*  *The database models/schema can be adapted as needed.* |
| *Export to Deliveroo – P2* | *It should be possible to connect with the Deliveroo* | *Official API’s for Deliveroo*  *https://api-docs.deliveroo.com/docs/introduction* | *The API allows the user to access Deliveroo services directly* | *Each site prefers the use of their official API integration.* |
| *Share on Instagram – P2* | *It should be possible to generate menu images in a square format and redirect to the user’s Instagram account.* | *React-to-image*  *https://www.npmjs.com/package/@hugocxl/react-to-image*  *Official API for Instagram*  *https://developers.facebook.com/docs/instagram-platform* | *React-to-image transforms the menu into an image.*  *The Instagram API allows the user to post the image.* | *React-to-image allows the user to adapt the menu to the Instagram format, making it easier to export without additional steps. The official Instagram API then allows the user to post.* |
| *PDF Export – P1* | *It should be possible to download the menu as a .pdf* | *Puppeteer https://pptr.dev/* | *Puppeteer is a JavaScript library which includes the ability to generate PDFs.* | *Puppeteer is a popular open-source HTML-to-PDF converter and has good support for modern HTML, CSS, and JavaScript.* |
| *Order a Printed Menu – P1* | *A new tab will open upon clicking on “Print Menu”*  *Linking to the Qwenta backoffice.* | *React-to-print*  *https://www.npmjs.com/package/react-to-print* | *React-to-print provides a simple and efficient way to trigger printing from React components.* | *React-to-print makes it easy to print a specific part of your web application allowing the user to customized printing solution.* |

1. **Links With the Backend**

* Node.js as the server language.
* Official API’s for Instagram and Deliveroo will be needed
* Selected database: NoSQL database such as MongoDB

1. **Domain and Hosting Provider Recommendations**

* The domain name will likely be a subdomain of Qwenta
* AWS, Google Cloud Platform or Microsoft Azure for hosting services (<https://www.bmc.com/blogs/aws-vs-azure-vs-google-cloud-platforms/#procons>) Though AWS is the current market leader in terms of capacity and service, Microsoft and Google are growing quickly to challenge that dominance.

1. **Accessibility**

* Browser compatibility - compatible with the latest versions of Chrome, Safari, and Firefox.
* At a minimum, the application must be easily navigated from the keyboard and readable by a screen reader.
* Device types – Desktop only.

1. **Third-Party Services**

* AWS, Google Cloud Platform or Microsoft Azure for hosting services
* Official API’s for Instagram (*https://developers.facebook.com/docs/instagram-platform)* and Deliveroo (*https://api-docs.deliveroo.com/docs/introduction)*

1. **Security Recommendations**

* Authentication, authorization, and encryption: Implementing a system that includes using HTTPS, JWT (JSON Web Token), and bcrypt ensures that only authorized users access sensitive data, strengthening account security.

1. **Website Maintenance and Future Updates**

**Website Maintenance:**

* Updates to optimize performance, check security, fix bugs, and check for technology updates/changes should be completed on a regular basis.

**Future Updates:**

* Integration of new features such as banner image animations and geometric shapes to the sections
* Integrate pricing directly into Menu Maker
* Create the ability to change payment methods
* Option to create an internal Menu Maker blog
* Improve SEO
* Collect user feedback
* Allow multiple profile management for owners of multiple restaurants
* Add support for other services like Door Dash, Uber Eats, Facebook, X, Etc.