Documentation  
  
Extensions:

* **Multilayered (somewhat) PURE RESTFUL API**. Starting with a base /api route, all routes are listed with hyperlink, each leading to a section of the api for /users, /menus, /ingredients and /glasses.  
  Each section lists it’s own routes, and information on using them, featuring GET, SEARCH, LIST for all sections, and some bespoke routes for certain sections such as listing by counting or registering a user.  
  20 routes in total.  
  Opted to exclude authentication requiring routes from API for now.
* **Error handling** throughout route handling, JavaScript and EJS. Featuring a dedicated error page with dynamic error messages, and pages with dedicated dynamic error message sections.
* **Duplicate checks**  for user registration with detailed error messages and data validation.
* **Custom, external API and internal DB** addition of drinks to a menu. All featured on the menu editing page, users can create a drink themselves, or search external or internal databases displayed dynamically on the page, and add these to menu.  
  All 3 ways use a singular route handler, and check for duplicate entries in the database for efficiency, and better data handling.
* **Entry suggestions** based on existing drinks within the database. As users create a drink, glasses and ingredients will be suggested based on typed input matching entries already in the database.
* **(Relatively) complex SQL queries** for creating a drink, transforming object oriented structure of a drink (with lists of ingredients and measurements) into relational database structures and join tables.  
  Addition of a drink is around 30+ lines of SQL, and involves 4 tables and 3 join tables for linking them, as well as checks for existing entries to pull IDs rather than duplicate entries.
* **Transactions** used in creating a drink, to ensure that entries are only added if entire process is successful.
* **Stored procedures, sanitisation, validation** used for all queries, and relevant user input to ensure security and validity of data entry.
* **Cascade updates and removal** for the join tables, allowing removing of drinks from menus, and in future deletion of users, menus, and updates to entries.