Capstone Cooking

# Team Members

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# Abstract

Capstone Cooking is a web app built for storing and managing personal recipes. Users can sign in with their account using an email and password, or create a new one with simple form checks to make sure the email is valid and the password matches. If login info is wrong, the app will prompt for another try or allow the user to reset their password through a link sent to their registered email. Resetting the password brings the user back to the site to make a new one before signing in again.

After a successful login, the app takes the user to the recipe home screen where folders and recipes are listed together. Recipes open in a scrollable reading mode with cards for ingredients and instructions, and each recipe has options to edit, tag, export, or delete. Folders and recipes show thumbnails and can be organized, searched, or filtered by keyword or tag. Adding or editing a recipe includes tools for titles, photos, ingredient lists, markdown instructions, and public/private toggles. Settings allow changes to measurement systems, recipe exports, and full account deletion if the user chooses.

# Tools & Technologies

* Create/edit/delete recipes
* User accounts
* Search recipes
* Recipe organisation, tags, folders
* Scale recipes
* Add photos of recipes
* Conversion between imperial and metric, and also between different measurements
* Filtered recipe searches
* Blacklisting of ingredients
* Requiring ingredients
* Cooking method
* Spice level (Chinese takeout spicy metre)
* Export recipes to PDF

# Requirements List

1. Sign-in form
   1. Email input box
   2. Password input box
   3. “Sign In” button
      1. If the email and password do not match those of an existing account, the user will be notified and prompted to re-enter their info or to reset their password
   4. “New Account” button
      1. Redirects to new account form
         1. Email input form
            1. Must match valid email address format
         2. Create password form
            1. Must be at least 8 characters long
         3. Confirm password form
            1. Must match ‘create password form’ perfectly
         4. “Create Account” button
            1. If all 3 inputs are valid, a new account will be created and logged in automatically
   5. “Reset Password” button
      1. Redirects to password reset form
         1. Email input box
            1. The user will type their registered email into the designated box
         2. Reset button
            1. User will be notified to check their email
            2. If the email in the input box has an account, a link to reset the password will be generated and sent to that email

The link will return the user to website to create and confirm a new password

* + - * 1. If the email does not have an account, no link will be sent

1. Recipe home screen
   1. App will redirect to this screen upon successful sign-in
   2. Recipes and recipe folders will be displayed in a list under their current directory
      1. Clicking a folder will unfold it to show any contained recipes/folders
      2. Clicking a recipe will open in it in reading mode
         1. Toolbar options
            1. Focus recipe cards
         2. Reading mode will open a scrollable version of the recipe with the title and picture at the top, the recipe card(s), and the body of the recipe text
      3. Each recipe will have an action panel button to the right of the recipe name indicated by three dots
         1. Edit recipe will open the recipe editing screen, prefilling the current information the recipe contains
         2. Edit tags will open the tag editing screen, prefilling the list of tags with existing recipe tags
         3. Export to PDF will export to a local pdf file, the name will be the name of the recipe followed by the date/time the pdf is created
         4. Delete button will lead to a confirm dialog
            1. If user clicks confirm, the recipe will be deleted
            2. If the user clicks cancel, no action will be taken
      4. Each recipe will have a thumbnail photo to the left of the recipe name
         1. If assigned, the chosen thumbnail photo will display here
         2. If unassigned or unable to load, a default photo will be displayed as a placeholder
      5. Each recipe folder will have an action panel button to the right of the folder name
         1. Collapse will hide the contents of the folder
         2. Export to PDF will export all recipes under the folder directory to a folder of PDFs or a single PDF
         3. Delete button will lead to a confirm dialog
            1. If user clicks confirm, the folder and its contents will be deleted
            2. If the user clicks cancel, no action will be taken
      6. The order of the list of recipes and recipe folders will be so that recipe folders will show at the top of the list, uncollapsed, followed by a list of all unorganised recipes at the bottom
   3. An “Add recipe” button will enter the recipe editing screen with an unfilled template
   4. A search button will be used for matching text in recipes titles, text, folders, tags and ingredients
      1. Clicking the search button will enter a search panel with options to filter by title, keyword, and tag and a button to apply the search parameters
         1. Entering a keyword will be done through a text field
         2. Entering a tag will be done through a set of tag buttons instanced by iterating through the set of user defined tags
         3. Applying a search will dynamically rebuild the displayed recipe list based on search parameters and reset the state of the search panel being shown
      2. Filtered searching a recipe keyword will iterate through recipe and folder titles as well as recipe contents using regex for matches
         1. Recipes with mismatched contents will be hidden from the recipe management screen
         2. Recipes with matching contents will be displayed on the recipe management screen
      3. Filtered searching a recipe tag will iterate through each recipe’s set of tags for matches
         1. Recipes with mismatched tags will be hidden from the recipe management screen
         2. Recipes with matching tags will be displayed on the recipe management screen
2. Recipe editing screen
   1. Title input box
      1. Required to save the recipe
   2. Main photo select
   3. Private/Public toggle
      1. If public, other users can discover this recipe through the search bar and save it to their library
      2. If private, only the author can view the recipe
   4. Recipe card section (ingredients, amounts, most basic instructions)
      1. Add multiple recipe cards for multi-part recipes
         1. If multiple recipe cards are added, the user can add a subtitle to the card below the main recipe title
      2. Title
      3. Cook time
      4. Servings
      5. Spice meter
         1. If left at 0, spice meter will not be included
         2. the user can choose between 1 and 5 peppers to show how hot Their recipe is
      6. Scale button
         1. When pressed, the user will enter a multiplier or an amount of serving sizes and the default recipe size will change to that amount
      7. Ingredient List
         1. Lists all ingredients along with the amount and measurement
         2. Buttons on each ingredient allow them to be reordered, deleted, edited, or converted to another unit of measurement
      8. Add ingredient form
         1. Amount text box
            1. Can enter whole, decimal or fractional numbers
         2. Measurement select box
            1. User can select from existing measurements or type their own (jar, box, etc.)
         3. Ingredient text box
            1. As the user types, existing ingredients starting with matching text will show as selectable suggestions
            2. If ingredient does not exist, it will be added to the list after the recipe with the ingredient is added
         4. Add button
            1. If all inputs are valid, a row of the ingredient details will be added above the form, and the form will be cleared
            2. If any input is blank or invalid, the form will notify the user to fix the error
   5. Main text area(markdown format)
      1. Toolbar
         1. Toggle markdown view switch
            1. Markdown view will show the recipe as a rendered markdown document
            2. Plaintext will render markdown artifacts and text as raw characters
      2. Text box
         1. Select header level
         2. Toggle bulleted list
         3. Insert photo
         4. Insert convertable
            1. Temperature
            2. Volume
            3. Weight
            4. Custom unit
   6. Tag input field
      1. Text input
         1. As the user types, pre-existing tags that start with the same text will show as clickable suggestions. Clicking them will add them to the list and clear the text box.
         2. Pressing enter while in the text box will trigger the same action as clicking the add button
      2. Add button
         1. If valid text is entered, the text entered will be added as a new tag and the text box will be cleared
      3. Tags list
         1. All entered tags will be displayed as buttons. If clicked, that tag will be removed from the recipe
   7. Save recipe button
      1. New file is created named using the recipe title and the datetime of creation
      2. Contents of recipe stored on new file
3. Settings screen
   1. Clicking the general metric toggle will iterate through all measurement units and simulate the user clicking the necessary toggles so that everything is the desired measurement system
      1. If toggled from true to false it will set all to imperial
      2. If toggled from false to true it will set all to metric
   2. Clicking the volume metric toggle will set the desired unit and save the updated setting
      1. If toggled from true to false it will set the preferred unit to teaspoon/cup/gallon
      2. If toggled from false to true it will set the preferred unit to liters/milliliters
   3. Clicking the weight metric toggle will set the desired unit and save the updated setting
      1. If toggled from true to false it will set the preferred unit to ounce/pound
      2. If toggled from false to true it will set the preferred unit to grams/kilograms
   4. Clicking the temperature metric toggle will set the desired unit and save the updated setting
      1. If toggled from true to false it will set the preferred unit to fahrenheit
      2. If toggled from false to true it will set the preferred unit to celsius
   5. Clicking the delete account button will lead to a confirm dialog
      1. If confirm the user account will be deleted and the user will be greeted to the sign-in screen
         1. User sign-in credentials will be removed from database
         2. Local user recipes will be deleted
      2. If cancel no action will be taken

# Updated Timeline

Week 1-2

**Nathan**: Getting familiar with Supabase and the syntax used in connecting to it and

**John**: Start drawing skeletons and/or working in Figma to develop a rough look for how each page will look.

**Calen**: Focus on developing an ERD for how the database should be structured; begin learning TypeScript to assist in other areas of the project.

**All**: get familiar with solidjs framework with typescript

Week 3-4

**Nathan**: Begin writing backend code to query Supabase to create or validate user accounts/profiles, set up the login page component

**John**: Set and style the interface for the login screen and account profile

**Calen**: Develop the database schema in Supabase, needing at least a user and/or account table already ready; confer with Nathan on DB needs, and help with building the interface for the login screen and account profile

Week 5-6

**Nathan**: Write backend code needed to create/edit/delete/organize recipes and images, and scaling/converting recipes

**John**: Develop and design the interface for the pages displaying and/or organizing recipes and photos

**Calen**: Verify tables needed to display/update recipes and photos are set up and test for functionality; confer with Nathan on DB needs, and work on the frontend getting recipe screens set up and styled and/or backend for recipes scaling and conversion (if needed)

Week 7-8

**Nathan**: Write backend code needed to enable search of recipes with and without filters

**John**: Develop and design the interface related to the search function (TBD on how it’s implemented)

**Calen**: Confer with Nathan on any DB needs for search function or other functions; work on design on the frontend for any pages still needing styling and assist with developing any other pages needed

Week 9-10

**Nathan**: Write backend code needed to export recipes to PDF

**John**: Develop and design the interface for PDF export and saved collection within the application

**Calen**: Confer with Nathan for any DB needs for export, test out functionality on all features, and work on the frontend where needed

Week 11-12

**Nathan**: Write backend to set up meal planning function

**John**: Develop and design the interface meal planning page/section; finalize any interface and styling changes

**Calen**: Confer with Nathan for any last DB needs, assist in meal planning feature (if needed), and finalize and smooth any design needs and flaws, respectively, on the front end

**All**: Testing out the entire application (both computer and phone) to ensure visual appeal and functionality of all features