

RecipeWise



A Techno Llama's Project by:
William Close, Michail Christofis, Jesse Watson, Jacquiline
Dilger, Mohammad Eqbal Haidari and Noah Mohamed

Project objectives

- **Target audience:**
 - Uni Students
 - Working Parents
 - Young Professionals.
- **Target problems RecipeWise™ will solve:**
 - Combat the rising cost of living expenses and an ever-increasing sense of hurry by providing simple, cheap and easily discoverable recipes.
 - Make pantry management and meal planning easier, adding features pen and paper cannot afford such as reminders and automatic pantry restocking through Woolworths, Coles or other stores.
 - Simple recipe discoverability will be achieved by allowing the user to input what they have in their pantry and retrieving recipes that use those ingredients.



Aims and Goals

Reasoning:

- The younger generation appears to be averse to cooking, despite the multitude of benefits it can provide.
- A lot of people avoid cooking due to time-related concerns.
- A lot of people don't have any experience in cooking

Goals:

- Users of our product will have their own accounts with secure login capabilities. Privacy is our top priority.
- Intuitively understand how to follow a recipe.
- Eliminate wasted time in the kitchen.
- Make cooking a fun process.
- Optimize search results based on the user's tastes, increasing the likelihood of them enjoying a recommended recipe.
- Allow users to provide feedback through a rating system.
- Ability to like recipes and save them for future reference.





Collaborative Workspaces

- **Microsoft Teams:**
 - MS Teams is the tool used for all of the team's communication and file sharing.
- **Trello:**
 - Trello is the tool used for the team's tasks and planning. Links to useful and regularly accessed files and resources are also located in Trello.
- **Office 365 (SharePoint, Word, Excel, OneNote):**
 - Office 365 is the tool that the team uses to collaborate on documents.
- **Figma:**
 - Figma is used for the creation and collaboration of all design artifacts; including personas, wireframes and prototypes.
- **Lucid Spark:**
 - Lucid Spark is used for real time brainstorming between team members.
- **GitHub:**
 - GitHub is the team's tool of choice for collaborative version control.



Software and Technologies

- **VS Code:**
 - VS Code has been chosen as the team's standard of code editors. This is because of the sheer number of plugins and its learnability.
- **Azure Pipeline:**
 - Azure Pipeline has been chosen as our pipeline provider for this project as it is free to start with and easy to understand.
- **HTML, CSS & JS:**
 - HTML and CSS have been chosen as the frontend languages of choice. **JavaScript** has also been chosen to add greater functionality.
- **PHP & SQL:**
 - PHP and SQL have been chosen as the project's backend languages that will deal with contacting the database to bring data to the frontend.



The people

For this project, we have a small group of 6 people. The group leader and individual managing the team and project is William Russel Close. The other individuals undertaking this project are; Jesse Watson, Michail Christofis, Jacqueline Rose Dilger, Noah Fuad Mohamed, and Mohammad Eqbal Haidari. All with a keen interest in the field of IT, we come as a group of individuals with varying skills and talents to undertake this project. With those skills in mind, the workload has been organized in a way that people can work on sections that lie in their skillset whilst also giving others an opportunity to branch out and attain new skills by helping in different areas.



The people

- **Team Leadership:**
 - William has been voted as the team leader.
- **Design:**
 - William, Noah and Michail have been the core members working on all things design with Jesse helping where needed.
- **Development:**
 - Michail, Jesse and Mohammad are the core members working on the development stage with all other members helping where needed as to spread the workload evenly.
- **Written Work:**
 - All members have been given tasks regarding the written work in assessments.

Plan and Current Outcomes

a. Plan

Link to updated timeline: [3.1- Section 3 When Draft.xlsx](#)

Week 5 (26 Sep – 2 Oct)					
<u>Design Phase - Wireframes</u>	26.09.2022	30.09.2022	<i>Michail Christofis with Jesse Watson, William Close</i>	8	not changed
<u>Design Phase - Prototypes</u>	26.09.2022	30.09.2022	<i>William Close with Noah Mohamed, Michail Christofis</i>	8	not changed
<u>Technologies</u>	26.09.2022	02.10.2022	<i>Jesse Watson with Mohammad Eqbal Haidari</i>	4	not changed
<u>Team progress presentation - project background</u>	26.09.2022	02.10.2022	<i>William Close with Michail Christofis</i>	4	not changed
<u>Create Repository</u>	26.09.2022	26.09.2022	<i>Michail Christofis</i>	1	changed
<u>Learn HTML, CSS, JavaScript, etc.</u>	27.09.2022	09.10.2022	<i>Everyone</i>	6	changed
<u>Deployment Pipelines</u>	27.09.2022	02.10.2022	<i>Jesse Watson with Michail Christofis</i>	3	changed
				31	

Week 6 (3 - 9 Oct)					
<u>Figure out Tools- Create technical requirement document</u>	05.10.2022	06.10.2022	Jesse Watson with Michail Christofis and Jacqueline Dilger	2	not changed
<u>Team progress presentation - plan and current outcomes</u>	03.10.2022	09.10.2022	William Close with Michail Christofis	4	not changed
<u>Team progress presentation - current challenges and team reflections</u>	03.10.2022	09.10.2022	William Close	4	not changed
<u>Team progress presentation - everyone's input</u>	03.10.2022	09.10.2022	Everyone	4	not changed
<u>Decide language, framework and infrastructure</u>	06.10.2022	09.10.2022	Michail Christofis with Jacqueline Dilger and Jesse Watson	2	not changed
				16	

Week 7 (10-16Oct)					
<u>Create Tickets based off of User Stories from Design Phase</u>	10.10.2022	16.10.2022	Jacqueline Dilger with Jesse Watson, Michail Christofis	5	changed
<u>Validation(Testing)</u>	10.10.2022	12.10.2022	Jacqueline Dilger with Michail Christofis	16	changed
<u>Video creation</u>	10.10.2022	16.10.2022	Jesse Watson with Michail Christofis	20	not changed
<u>Initial Server Setup</u>	11.10.2022	12.10.2022	Michail Christofis	5	not changed
<u>Implement Tickets - Start Coding</u>	11.10.2022	25.10.2022	Michail Christofis with Jacqueline Dilger, Jesse Watson, William Close, Noah Mohamed and Mohammad Eqbal Haidari	24	not changed
<u>Project background – Motivation</u>	11.10.2022	15.10.2022	Everyone	2	changed
<u>Project background – The team</u>	11.10.2022	15.10.2022	Everyone	2	changed
<u>Project background – Project aim</u>	11.10.2022	15.10.2022	Everyone	2	changed
<u>Project background - Project goals</u>	11.10.2022	15.10.2022	Everyone	2	changed
				143	

Week 8 (17 - 23 Oct)

<u>Work on initial design and coding integration issues</u>	17.10.2022	23.10.2022	<i>William Close with Jacqueline Dilger, Jesse Watson, Michail Christofis, Noah Mohamed</i>	5	not changed
<u>Assign any extra design and coding tasks that occur</u>	17.10.2022	23.10.2022	<i>William Close with Michail Christofis</i>	1	not changed
				6	

b. Plan review

Create Repository

Title	Start Date	End Date	Lead By	Hours
<u>Create Repository</u>	26.09.2022	26.09.2022	<i>Michail Christofis</i>	1

- Create Repository was completed earlier than initially planned in the timeline since it was required to have been completed, so as to proceed with the Deployment Pipelines task. As Techno Llamas is taking an Agile approach to project management, the team decided to complete this task earlier than had been planned.

Learn HTML, CSS, JavaScript, etc.

Title	Start Date	End Date	Lead By	Hours
<u>Learn HTML, CSS, JavaScript, etc.</u>	27.09.2022	09.10.2022	Everyone	6

- Learn HTML, CSS, JavaScript, etc. was a task created later in the study period to prompt the members to spend time learning the languages they were going to use to develop the product being designed.

Deployment Pipelines

Title	Start Date	End Date	Lead By	Hours
<u>Deployment Pipelines</u>	27.09.2022	02.10.2022	Jesse Watson with Michail Christofis	3

- Deployment Pipelines was a task required researching and setting up a deployment pipeline for the project's source code. Because of a lack of time and understanding of the topic, the team decided to delay this task by a week.

Create Tickets

Title	Start Date	End Date	Lead by	Hours
Create Tickets based off of User Stories from Design Phase	10.10.2022	16.10.2022	Jacqueline Dilger with Jesse Watson, Michail Christofis	5

- The task of creating tickets was delayed a week due to wireframes having higher priority in the scheduled week. Therefore, the team didn't have time for this but started it the Monday of the next week.

Validation Testing

Title	Start Date	End Date	Lead by	Hours
Validation (Testing)	10.10.2022	12.10.2022	Jacqueline Dilger with Michail Christofis	16

- Validation (Testing) was located in week 5 of the timeline. However, due to its dependency on the Design Phase- Wireframes task that was not completed until end of week 6, the team was required to reschedule the task to week 7.

Project Background

Title	Start Date	End Date	Lead by	Hours
Project background – Motivation	11.10.2022	15.10.2022	Everyone	2
Project background – The team	11.10.2022	15.10.2022	Everyone	2
Project background – Project aim	11.10.2022	15.10.2022	Everyone	2
Project background – Project goals	11.10.2022	15.10.2022	Everyone	2

- Validation (Testing) was located in week 5 of the timeline. However, due to its dependency on the Design Phase- Wireframes task that was not completed until end of week 6, the team was required to reschedule the task to week 7.

c. Feasibility

- The team is currently in weeks 7 – 8 of the RMIT study period. In relation to the team's timeline, we are up to week 6 & 7 tasks. The tasks in this section of the timeline are related to design and getting ready for development. The next stage, starting week 7 & 8, is the development stage. The GitHub repository has been set up, the Azure Pipeline initiated and research/design of databases and servers is being finalized.
- The team is towards the end of the norming stage. We are still learning each other's idiosyncrasies, however we are certain that we will soon have reached the performing stage. Despite this, we are on track to begin development in the coming week. The feasibility that our team will finish the M/EVFs in our project proposal is high. We have done significant research and learning over the past few weeks, leading to a complete understanding, by all team members, of what we are building. However, we continue to face some risks.

Risk No.1

# 1 Not using Agile Methodology accurately			
Owner	Team Leader: William Close & Project Manager: William Close/Michail Christofis		
Description	Not developing with the Agile Software Development Methodology in mind- as we are relatively new to creating IT systems and as such, are new to the agile methodology this could mean we are not keeping to the agile methodology framework and risk having tasks not properly managed.		
Severity	Medium	Probability	Medium
Mitigation	Way to mitigate some of the risk from this would be to have the SCRUM master, and project manager to research agile methodology and what that involves. Another way to mitigate some of the risk would be to adjust how we are using the methodology so that it fits in best with how our group works- and with what team members respond well to.		

Risk No.2

# 2 Not using Agile Methodology accurately			
Owner	Team Leader: William Close & Project Manager: William Close/Michail Christofis		
Description	Not developing with the Agile Software Development Methodology in mind- as we are relatively new to creating IT systems and as such, are new to the agile methodology this could mean we are not keeping to the agile methodology framework and risk having tasks not properly managed.		
Severity	Medium	Probability	Medium
Mitigation	Way to mitigate some of the risk from this would be to have the SCRUM master, and project manager to research agile methodology and what that involves. Another way to mitigate some of the risk would be to adjust how we are using the methodology so that it fits in best with how our group works- and with what team members respond well to.		

Risk No.3

# 3 Technical Difficulties			
Owner	Development team: Michail Christofis, Jacqueline Dilger, Jesse Watson, Mohammed Eqbal Haidari & Project Manager: William Close/Michail Christofis		
Description	Technical difficulties that may arise could be if we are trying to implement features that we may have overestimated.		
Severity	High	Probability	Low
Mitigation	Ways to mitigate risk from this would be to have short sprints- such as weekly sprints rather than fortnightly sprints when in the development/implementation phase. This would be to catch any technical difficulties that may be encountered quickly and to either reassess if the feature can be adjusted, or if time needs to be allocated for research and problem solving.		

Risk No.4

# 4 Lack of testing			
Owner	Entire Team		
Description	Lack of thorough testing could lead to gaps in the quality of the work and could cause issues during the deployment phase.		
Severity	High	Probability	Medium
Mitigation	Ways to mitigate risk from this would be to start testing early, and to implement the agile methodology of regular iterations. A variety of testers including UAT and Developers with proper documentation to accurately capture any issues that may occur during testing. Time estimates may also need to reflect the testing phase accurately, as there could be iterations of design and development in this phase.		

Design Walkthrough

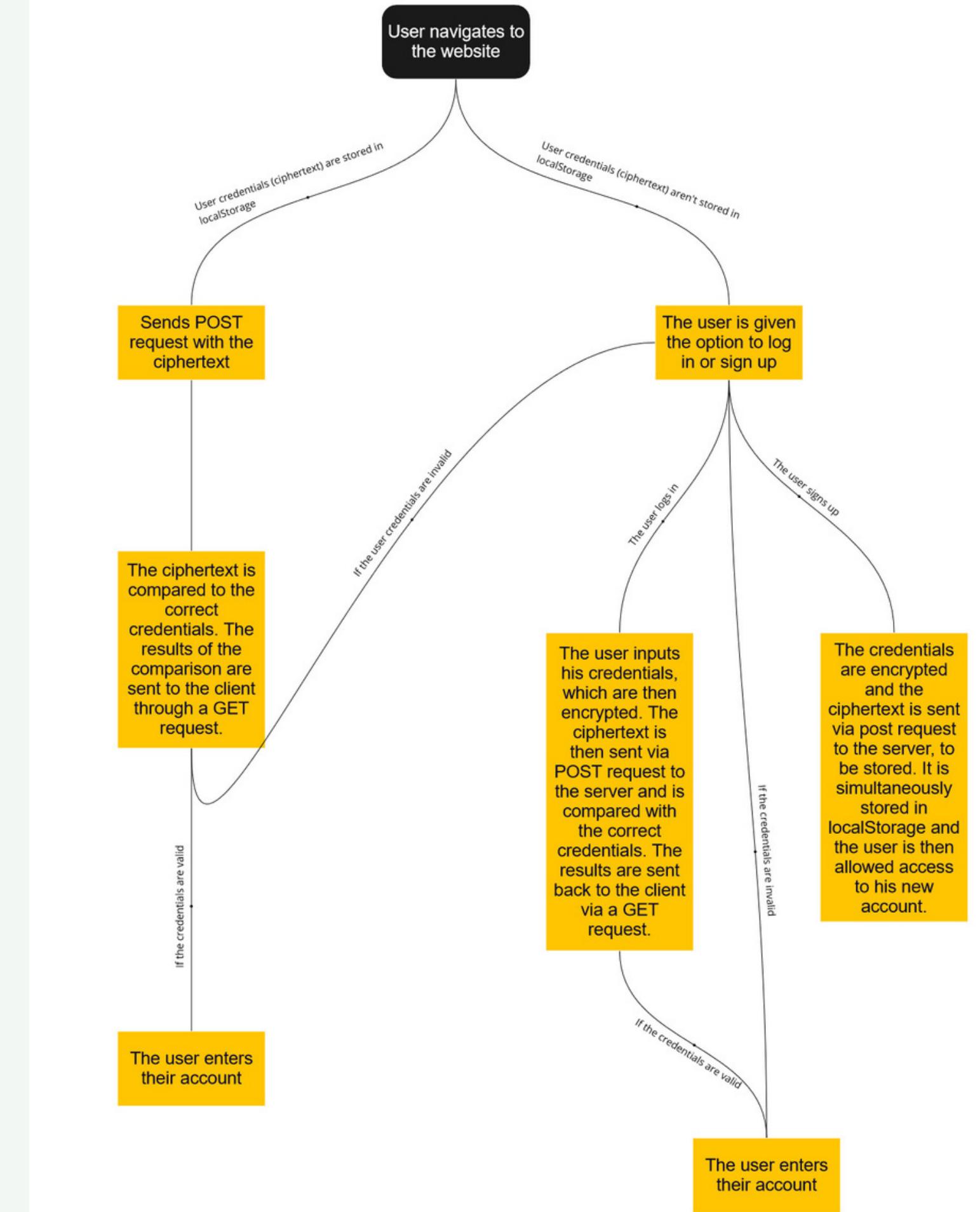
Project Artefacts

Our five MVFs are:

1. Secure log in - RSA Encryption
2. Account Creation
3. List of Liked Recipes
4. Search Feature
5. Filter Feature (by category)

Secure Log in - RSA Encryption

- Secure RSA Encryption is required because of the nature of the sensitive information being stored on servers of users using the RecipeWise service
- The RSA Algorithm is a public-key cryptosystem; the key of which is a product of 2 large prime numbers, and the private key. This algorithm allows the user to encrypt a message without anyone having the ability to decrypt it, apart from the intended recipient who has the private key.



Further MVFs

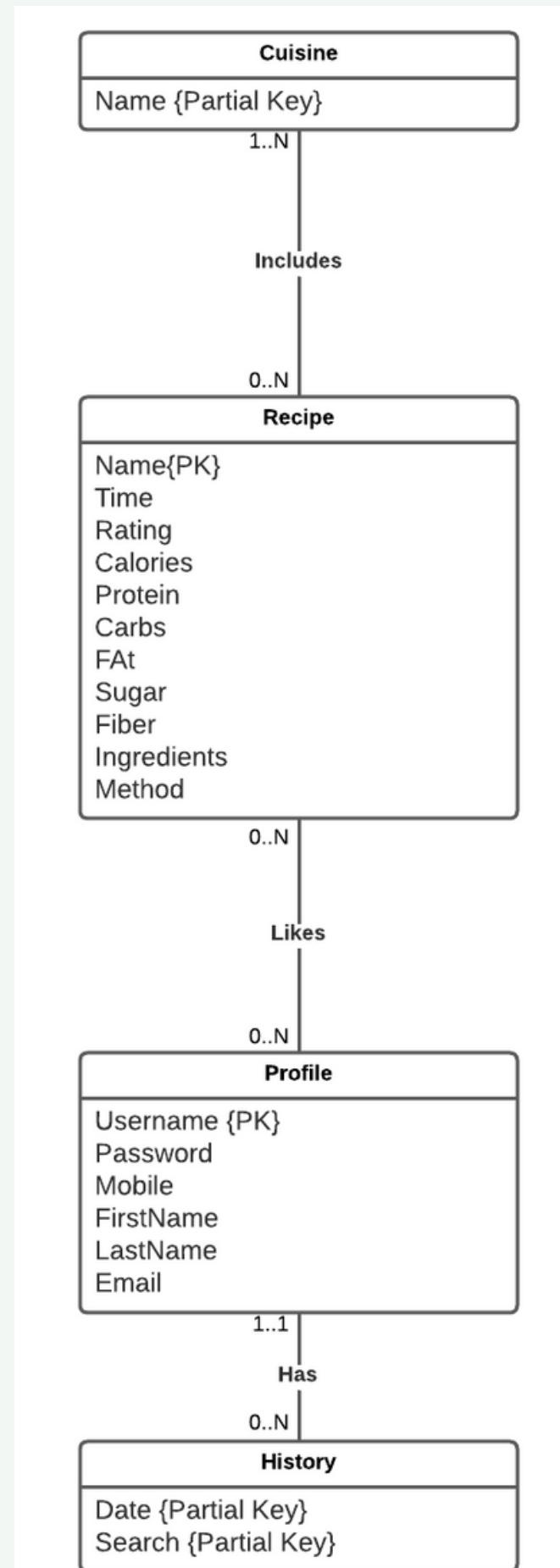
The rest of the MVFs are covered on the Figma Wireframes and Prototype. Furthermore, the underlying entity relationships in the database, that make everything possible, are presented in the figure on the right.

Wireframes:

<https://www.figma.com/file/lIcp3hZINGEoRTYkiKAF17/Wireframes?node-id=0%3A1>

Prototype:

<https://www.figma.com/proto/lIcp3hZINGEoRTYkiKAF17/Wireframes?node-id=20%3A684&starting-point-node-id=206%3A2699>



Current Challenges

Our team has come across various challenges throughout the duration of this unit so far. Notably, after members withdrew, it was a bit of a reshuffling period that we entered for weeks to follow as we adjusted to having different members. This was challenging because it began to feel overwhelming with all that we were setting out to achieve. The main challenge we face is communication. We have gotten much better at it over the past few weeks, although, it has been a challenge with assigning of tasks and getting work done when members drop out of communication for various periods of time. Thankfully, after some constructive discussions, these situations are minimal thus forth and therefore we have started making great progress with the project! If such a situation were to arise again, I believe that a thorough discussion, will lead to a prompt resolution.

Essential Information

This assignment was produced by the Techno Llama's Team undertaking Building IT Systems SP3 2022.

The group members details are as follows:

- William Russell Close - s3921219
- Jesse Watson - s3933489
- Michail Christofis - s3923089
- Jacqueline Rose Dilger - s3922650
- Noah Mohamed - s3967497
- Mohammad Eqbal Haidari - s3960182

References

Grilled Chicken and bacon:

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