Final Report:
Erasmus+
Knowledge Project

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Introduction

- Built a native mobile app for iOS AND Android using React Native (Facebook)
- Worked as part of a larger team with students and faculty from various countries and fields (Erasmus+)
- All towards education and behavioural guidance for coeliac disease sufferers

Methods

Qualitative

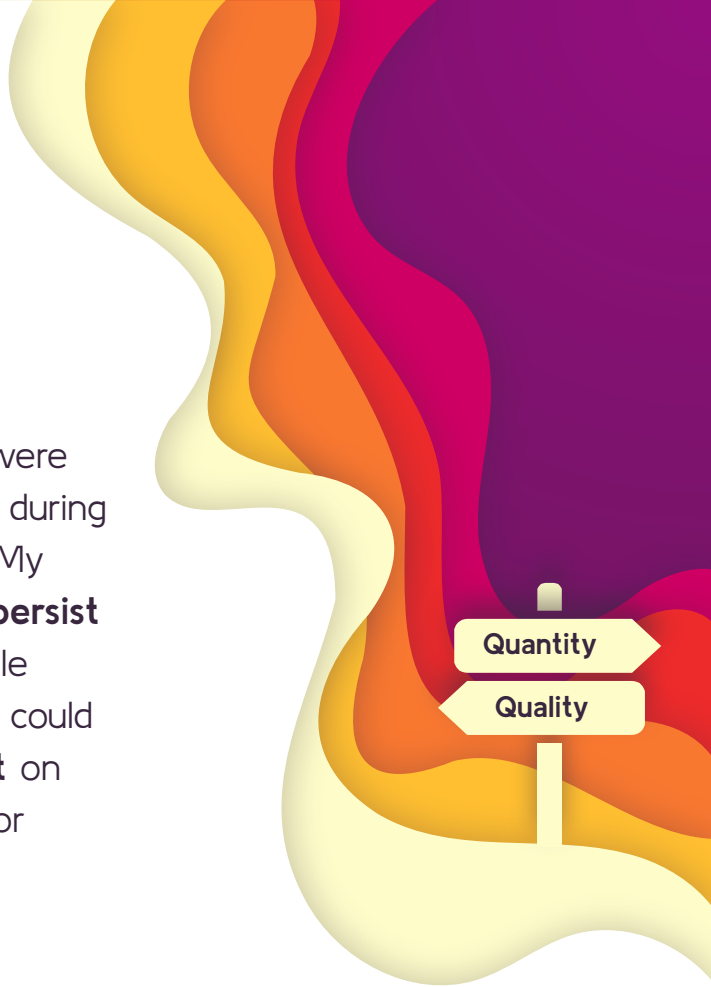
Planned to observe and question coeliac patients during a 21 day challenge. This was my chance to isolate one metric for my study; **The effect of gamification on engagement**

And

To achieve this a coeliac **control** group would have been set up to test a quiz **without any gamified elements**. Then there would have been a another **group** to test the **gamified quiz**.

Quantitative

Measurements were to be taken also during the test period. My app is setup to **persist data** over multiple instances so we could track **time spent** on certain screens or login **frequency**

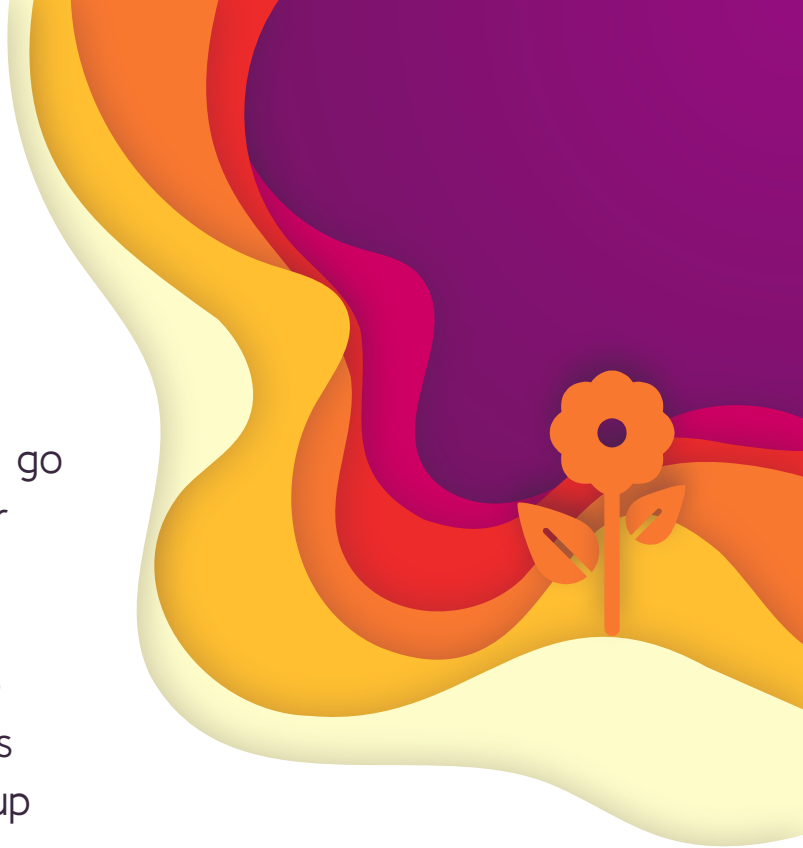


Results

Pandemic

- Unfortunately the 21 day challenge was unable to go ahead due to the Covid-19 pandemic and another high level study could not be produced in time

- However a clear path has been laid down for the mantle to be taken up again once the dust settles and I feel confident that another group can pick up the work done by the amazing Erasmus+ team



Implemented Feature Set

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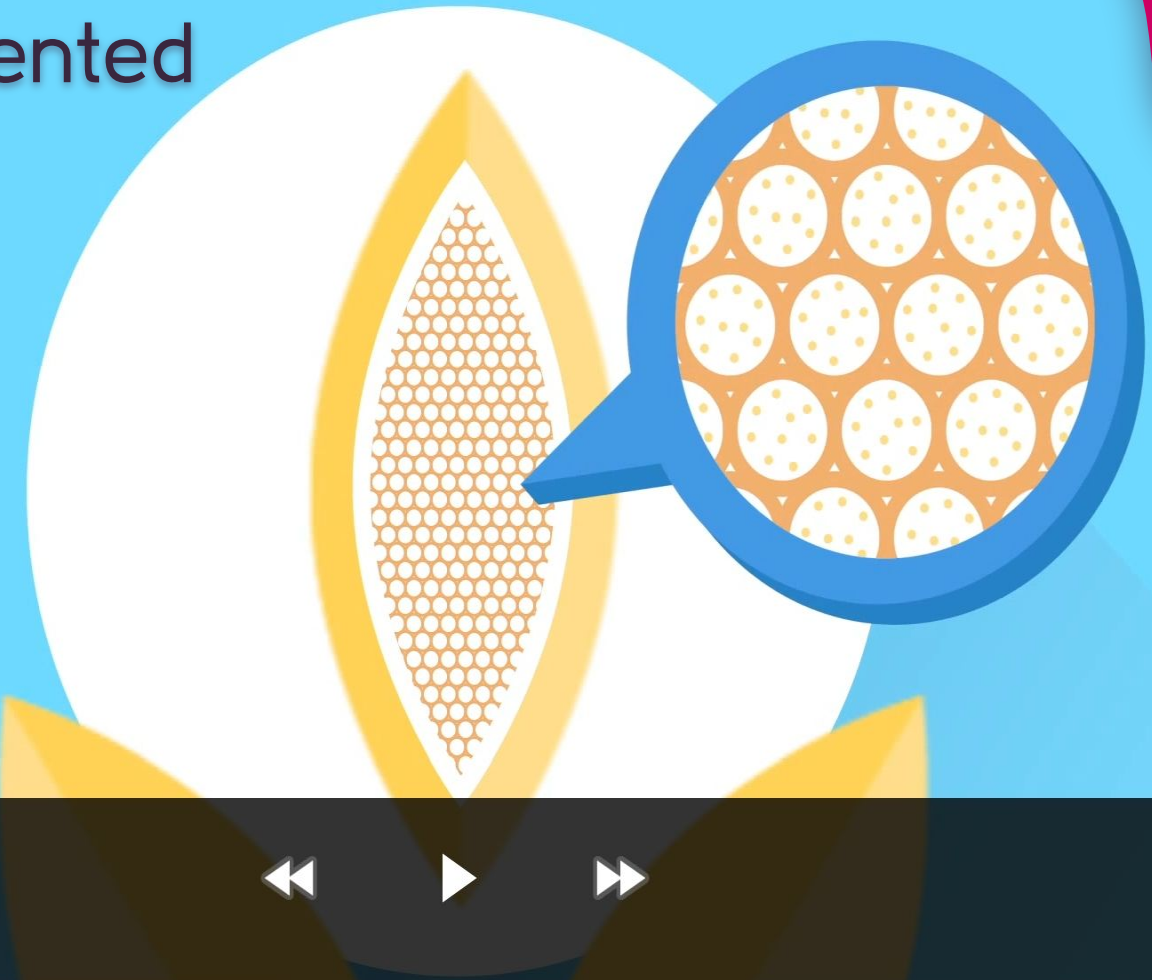
Tech Stack



Tech Stack and Feature Set

1. Python **flask web server**
   a. **API** pulls medical data from desqol **GDrive**
   b. Stores locally on MariaDB **datastore**
2. **Shared Erasmus+** celiapp **backend** at play
3. Gamified **Quiz** using ***streaks*, particles** and more
4. **Resource** management system
   a. **Persistence** upon exit
   b. Potential **real world impact**
5. Stack **navigator**
   a. + Extra **back handling** and **alert**
6. **Native video** player and **sound** effects
7. Custom **loading** bar, buttons and font

Feature Set Demo

Conclusions

- For **my own achievement** I feel strongly that delving into the **React Native development** wormhole AND the **world of research** will stick with me for a time to come
- As a team we have achieved a great deal towards creating a **long lasting change** in behaviour and therefore **quality of life** for the coeliac sufferers
- Overall this '**masterpiece**' project has really come together on **all fronts** making the final app something I am quite satisfied with
- **Further** work on this project would be to make a **more cohesive experience**, e.g coins on videos with more links between video and quiz AND even more **data points** utilized.

Thank you!
Questions?
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