

## INTRODUCTION

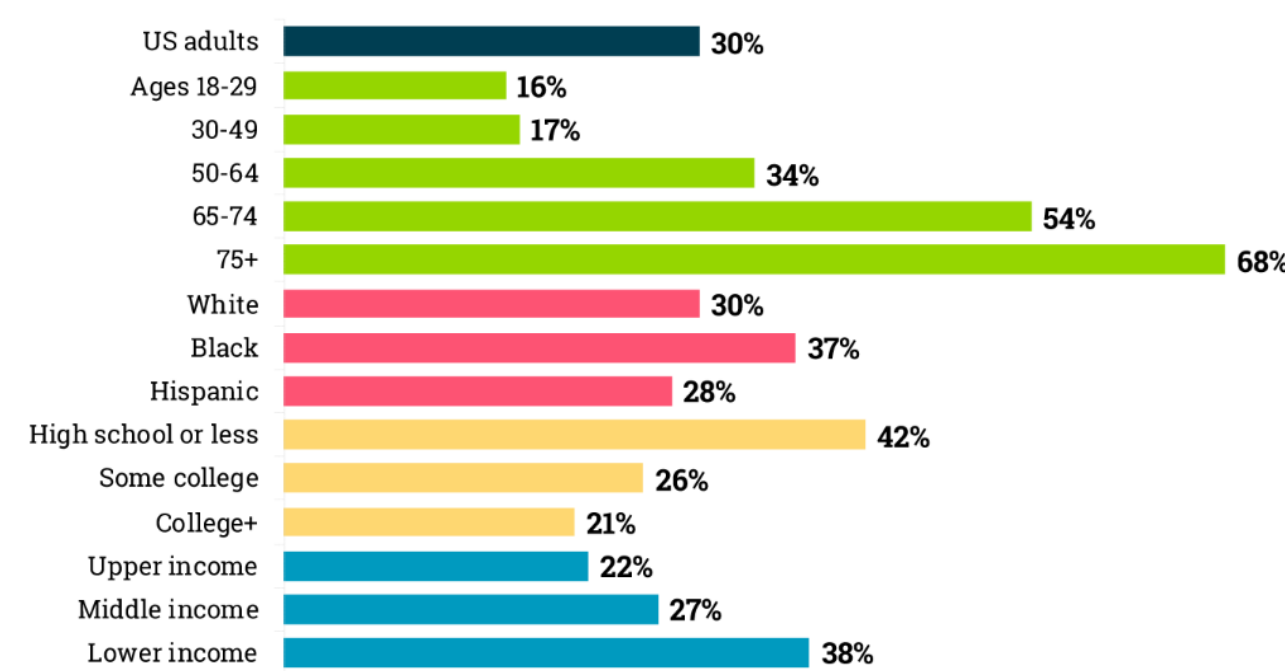
### Abstract

The EasyPeasyPal app aims to simplify technology for anyone, making all of the essential quality of life improvements effortless for the user, all through an intuitive and seamless app experience. Regardless of your level of tech experience, EasyPeasyPal serves as your trusted companion, empowering you to harness the full potential of technology to address your everyday requirements

### Introduction

Technology can be overwhelming, and this is more emphasized for people who have zero experience with technology, or individuals who have a certain disability or ailment that prevents them from using regular apps that are available. The main issue we are trying to resolve is making the features we use every day fully accessible to anyone who wants to take advantage of the current tech features available.

### Share of US Adults with "Lower Tech Readiness"\*



## GOALS

The goal we are aiming for with EasyPeasyPal is to provide an efficient and simplistic user experience, to accommodate anyone who is in need of tech solutions, or people who are interested in exploring the benefits technology has to offer today. In order to achieve our main objectives, we will have to improve the current prototype features in the app until it reaches an adequate level of quality and reliability. The main functionalities that we will focus the goals for EasyPeasyPal are the following:

- Appointment Manager/Assistant
- Accessible Communication Features
- Medications Manager/Assistant
- Health/Fitness Assistant
- Search Engine Features
- Simple Voice commands and accessibility options

App functions currently in development stages and are subject to change and expansion.

## METHOD, PLAN or APPROACH

### Technology decisions

- **Development Tools:** Visual Studio Code and Android Studio for coding and debugging.
- **Methodologies:** Implementing software engineering methodologies for high-quality software. (Agile, PP)
- **Technology Stack:** Flutter SDK, Dart, Android Studio (C++ & Java) for full-stack development.
- **Firestore Integration:** Leveraging Google Firestore and Google authentication.
- **Documentation:** Access to extensive documentation and packages for development.

### Design decisions

In crafting our app's design, we have embraced a minimalist yet aesthetically pleasing interface. This deliberate choice aims to ensure a seamless user experience by eliminating any potential user confusion. Our unwavering commitment lies in providing an efficient and streamlined interface, ultimately enhancing accessibility for our users.

**EasyPeasyPal**

Easy Peasy Pal is your comprehensive digital companion, designed to simplify the complex, enhance your well-being, and bring effortless efficiency to every aspect of your life. Seamlessly manage your appointments, medications, health, communication, and access to information, all within a single, user-friendly app.

- Intuitive Appointment Manager**
- Effortless Communication Features**
- Efficient Medication Tracker**
- Seamless Search Experience**
- Physical/Mental Health Wellness Assistant**

Easy Peasy Pal boasts an uncomplicated and user-friendly interface, making it ideal for seniors and individuals with disabilities. Say goodbye to complex features and cluttered screens. With its intuitive design, you can effortlessly navigate through the app, even if you're not tech-savvy.

In times of need, staying connected with your caretaker, family, friends, and emergency contacts is of paramount importance. Designed to make reaching out to your support network effortless and reliable.

Managing your medications should never be a source of stress. Simplifying the process of tracking your dosage, scheduling when to take medications, and ensuring you are always restocked. It's designed with a focus on precision and ease of use, making it the ideal tool for all users.

Taking care of your physical and mental health has never been easier. With the all-in-one health assistant features, thoughtfully designed to help you maintain a balanced and healthy lifestyle with effortlessly daily exercises and workout routines.

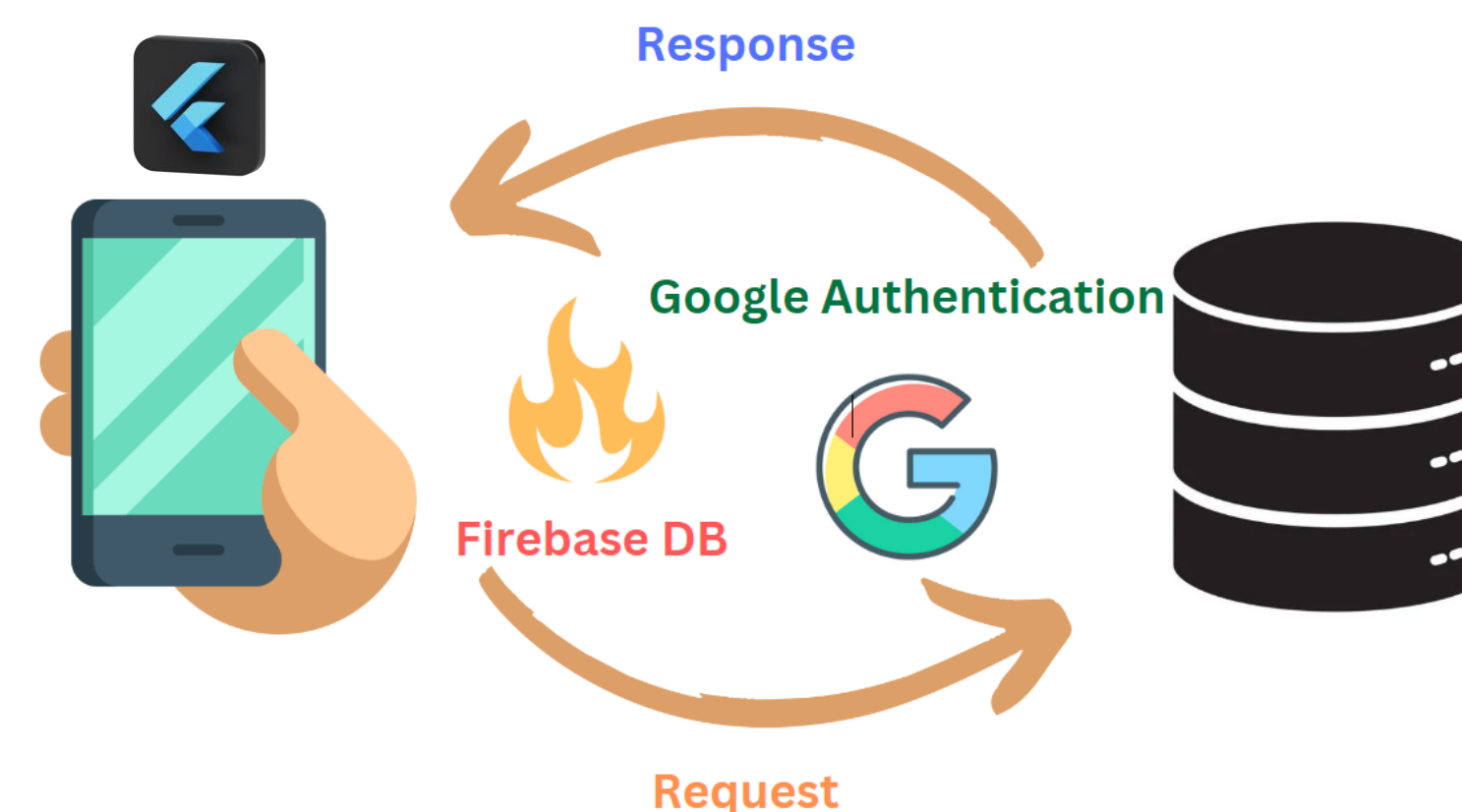
Accessing all of your records should be a breeze, and with the "Today's Events" button you will be able to access all aspects of your information on Easy Peasy Pal. Just one tap and you will be able to retrieve any information you require.

## RESULTS or PROGRESS

The initial setup of the app was executed successfully with all essential tools updated to their latest versions. Leveraging the power of Flutter and Dart, we accomplished the creation of the initial menu and fundamental functions for the app prototype, all while utilizing GitHub for efficient version control. However, our journey was not without its challenges, notably dealing with version discrepancies and integration complexities, such as linking the Firestore database and implementing Google authentication into the project.

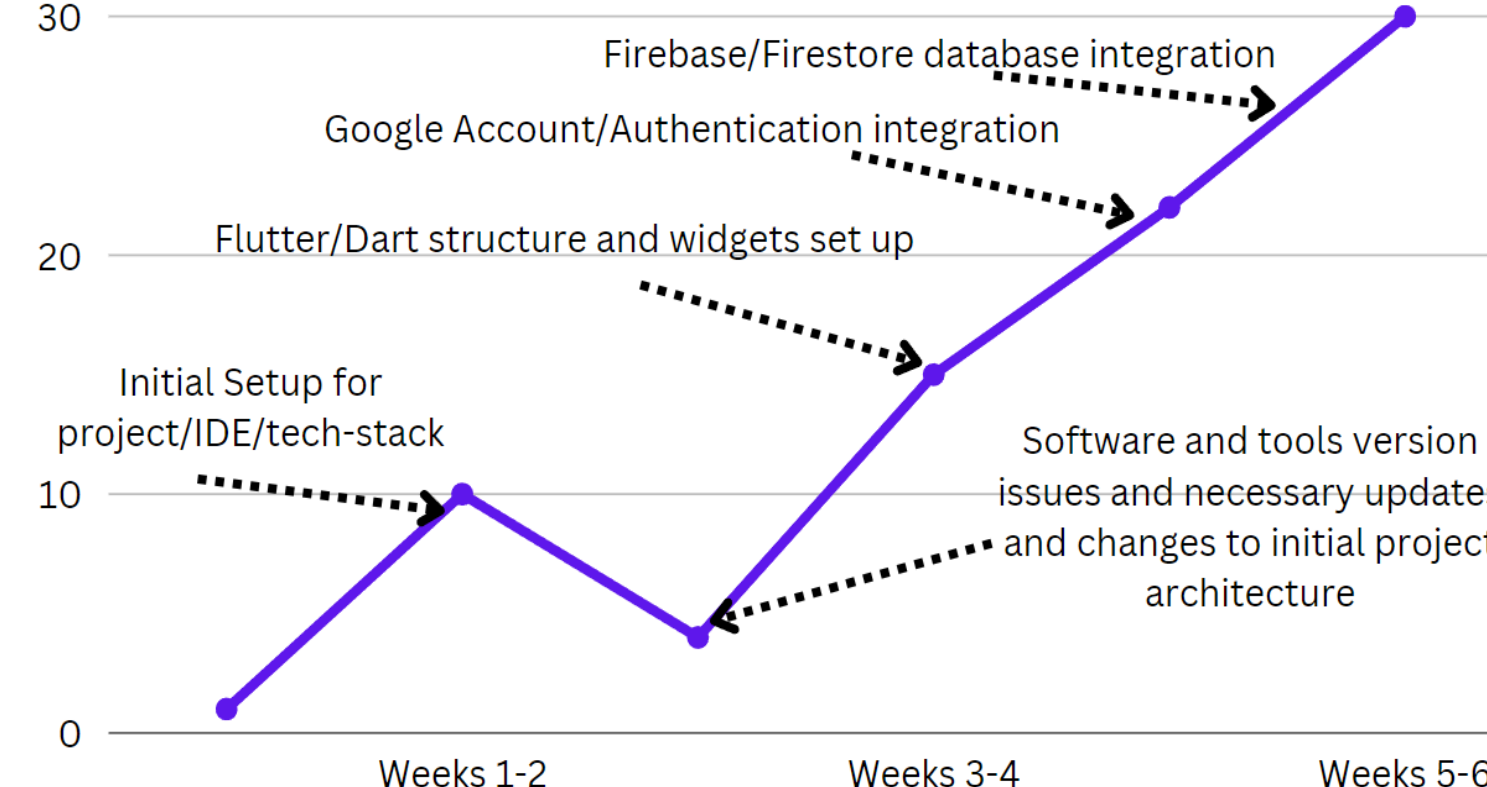
Having successfully established this setup, our development endeavors are now poised for increased efficiency and confidence. Building upon the current enhancements implemented in the app, our focus is directed towards the following pivotal areas:

- Enhancement and expansion of existing app features
- Advancement of Firebase functionalities and backend db
- Comprehensive coverage of authentication/security measures
- Streamlining user menu & account creation management.
- Refinement of design/visual elements for the final product.



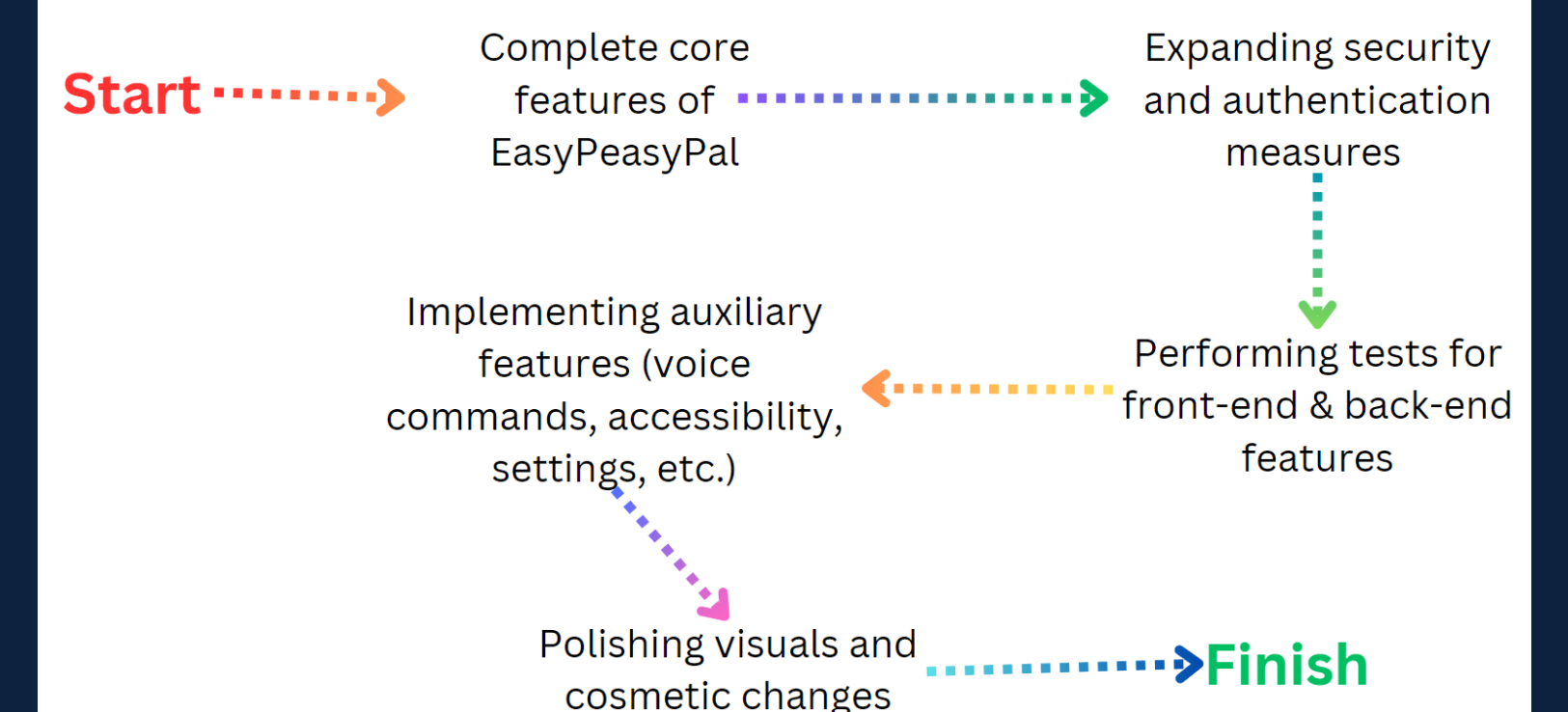
The solid architecture for we achieved for EasyPeasyPal has greatly increased the level of progress towards the end goal. With the full authentication features and database set up, the next steps involve intensive work and testing periods to achieve the optimal results as we near the end of the semester.

### Chart Depicting overall progress for Senior project:



## TIMELINE

In light of the substantial progress and refinements made to the app, we have thoughtfully realigned our timeline to prioritize the development of core features. This strategic shift involves the adoption of Agile methodologies and paired programming practices to ensure an exceptional level of usability. Once these core features reach their optimal state, our dedicated focus will pivot towards the incorporation of supplementary functionalities as we approach the final phases of the development cycle. This approach will also encompass any necessary cosmetic enhancements to achieve a fully polished product.



## CONCLUSIONS

Our project has been a rigorous test of our software engineering skills, presenting us with valuable learning experiences through the common challenges we've encountered. In the pipeline, we plan to introduce specialized caregiver accounts and, expectantly, integrate voice commands.

Our team is resolute and confident in our ability to deliver a product that precisely aligns with the needs of our target audience. Moving forward, our workflow will consist of individual contributions to specific app features, with continuous collaboration, all while adhering to established software engineering practices and version control.

As we approach the subsequent development stages, we opt for a procedural approach, integrated with Agile methodologies, and paired programming (PP) empowering us to tackle the remaining project phases with utmost efficiency and a solid project structure. We are committed to delivering a successful final product.

## CITATIONS

Dart & Flutter Documentation: (<https://dart.dev/guides>) & (<https://docs.flutter.dev/>)

Firebase/Firestore Documentation: <https://firebase.google.com/docs>

Lower Tech Readiness Chart: <https://www.marketingcharts.com/industries/technology-118238>