Criteria A: Planning

The development of Daykeeper required careful and extensive planning to ensure the final product aligned with my vision and met the needs of users. The planning phase involved setting clear objectives, conducting in-depth research, and outlining a structured timeline for development.

The primary learning goal for this project was to create an intuitive and efficient journaling platform that could help people to keep track of their lives, making every moment meaningful. This goal stemmed from my long-standing interest in journaling. I have always been fascinated by how the practice of recording your life and organizing your thoughts could make a major difference in your personal growth. My passion for technology also played a key role in shaping my approach to this project. I wanted to bridge the gap between traditional journaling and digital efficiency, creating a platform that made it easier for users to track their lives without requiring long-form writing.

The inspiration came from personal experiences, during a conversation between me and my sister in November 2023. We wanted to create a community based project for our local church aiming to keep people's histories alive. At first, the idea was to create a website that would help to preserve the history of those who will be forgotten by society, like army veterans and old people without a big family. With time, this idea changed to a journal with a social media style. I actively started the project in February 2024, building the platform by myself. During this time, many ideas were introduced, such as a social media style, bullet journal method, and many others.

Before starting the development of Daykeeper, I conducted extensive research into existing journaling methods and digital platforms. I explored various approaches to journaling, including reflective journaling, which encourages users to write detailed reflections on their experiences and emotions, gratitude journaling that focuses on positive aspects of each day, reinforcing mental well-being and even Morning Pages, first introduced in the book “The artist’s way morning pages Journal” by Julia Cameron in 1997, being a free-writing technique where users write without restrictions, what also contributed to form the general idea of Daykeeper. After research I found another method that was Ideal for Daykeeper’’s approach, the Bullet Journal. The Bullet Journal method, introduced in the book “The Bullet Journal Method: Track the Past, Order the Present, Design the Future” by Ryder Carrol in 2018, is a method where you write a daily journal in bullet points. This method allows you to quickly create your daily page, adding events, notes, to-do lists, graphics, and since it’s extremely customizable, you can even include other methods in it, such as the gratitude Journal. With that, I determined that the Bullet Journal approach was the best fit for Daykeeper.

To complement the methodological research, I also examined other digital platforms, including popular social media networks, like Instagram and Twitter, calendar applications, focusing on the new Notion Calendar, and existing journaling apps such as Day One Journal, one of the best inspirations for the project, Daylio, and Reflectly. By analyzing these and other platforms, I identified key features that could enhance Daykeeper. The ability to tag locations within journal entries was inspired by Day One Journal, which integrates mapping tools to provide contextualized memory tracking. Emotion tracking, which helps users visualize their mood patterns over time, was influenced by Daylio and many other aspects were enhanced,

added and improved in Daykeeper. This competitive analysis helped refine my vision for the platform, ensuring that it offered a unique yet familiar experience for users.

To ensure the successful execution of this project, I developed a detailed timeline outlining key milestones. In November 2023, conceptualization and discussions about preserving personal histories through journaling led to the initial idea for the project. Between December 2023 and January 2024, I conducted research into journaling methods, social media engagement, and user behavior, gathering insights that would inform the development process. By February 2024, I had started active development, working on initial coding, wireframing, and design. During February 2024 and January 2025, the idea of Daykeeper evolved into a better platform. The creation of user data, modification in how posts would work and improvements in many different aspects of the project were crucial for its development. Daykeeper today is a much different and much better project than it once was, with numerous unique features. After January 2024, the launching preparations have started, with the creation of a brand identity, website, social media and community.

Throughout the planning process, I encountered several challenges that required adaptations. One of the most significant difficulties was designing the user interface. As someone with limited design experience, creating an intuitive interface that felt natural and accessible to users was a challenge. To overcome this, I sought assistance from freelance designers and studied UI/UX best practices, allowing me to refine the visual and interactive elements of the application. Another major challenge involved optimizing database performance. The decision to use MongoDB, a non-SQL database, was based on its scalability and flexibility. However, retrieving data efficiently in a social media-style application presented significant obstacles. To address these concerns, I had implemented unique indexing strategies and clustering techniques, which significantly improved query performance and reduced response times. Security measures also posed a challenge, as ensuring user data privacy required more knowledge about cybersecurity best practices. This involved implementing encryption protocols, securing API endpoints, and setting up rate-limiting measures to prevent abuse. Additionally, I integrated AWS Rekognition, an AI image recognition tool, to assist with content moderation and developed multi-layer validation processes to enhance data protection.

The planning phase of Daykeeper was an essential foundation for its success. By establishing a clear learning goal, defining success criteria, conducting thorough research, and developing a structured timeline, I was able to create a product that met user needs while aligning with my vision. The experience of planning and adapting to challenges reinforced the importance of strategic thinking, perseverance, and continuous learning. As the project moved into the execution phase, these foundations played a crucial role in guiding development and ensuring that Daykeeper evolved into a robust and meaningful platform.

Criterion B: Applying Skills

The development of Daykeeper required the application of various skills that were critical to the success of the project. From research and problem-solving to technical research and adaptability, a wide range of abilities was necessary to bring this platform to life. Each stage of development required a different set of skills, and applying them effectively allowed me to

overcome obstacles, refine the project, and create a functional and engaging digital journaling platform.

One of the most crucial skills applied during the development of Daykeeper was research. This skill played a fundamental role in shaping the platform's concept, features, and user experience. Before writing a single line of code, I conducted extensive research on existing journaling methods, social media creation, application scalability, user behavior and cyber security through many different articles of distinct topics, researches and old college classes. It was essential to understand how people engage with digital platforms and what features would make a journaling application appealing and effective. One of the most important researches was Daily Blogging for a Year: A 'Lean' Pathway to Launching a Web-Based Business" where Griffey explores how consistent daily blogging can serve as an effective strategy for entrepreneurs to test ideas, build audience engagement, and launch successful online businesses. Similar to that, the article "Journalogue: Voicing Student Challenges in Writing through a Classroom Blog." from Thomas, Suneeta was also an important material, since it highlights the benefits of journaling in a class, such as articulating writing challenges, promotion of collaboration and improving writing skills.

Exploring various journaling techniques allowed me to compare different approaches, including reflective journaling, gratitude journaling, and stream-of-consciousness writing. One method that I explored to form the idea of Daykeeper was "The Artist's Way Morning Pages Journal" by Julia Cameron, a method where you write what you are thinking at the time. Even with many good options, after evaluating the benefits and limitations of each method, I identified the Bullet Journal technique by Ryder Carroll in the book "The Bullet Journal Method: Track the Past, Order the Present, Design the Future" as the most suitable for Daykeeper. This method's ability to capture brief, structured entries aligned well with modern users' preference for efficiency and minimal effort.

Beyond journaling methodologies, research into the technological aspects of the project was equally important. Since I was building the platform from scratch, I had to gain a deep understanding of application development, database management, API creation and many other topics. I studied different programming frameworks and third-party tools to determine which technologies would be the most effective for the project. Among the project, more than 30 different third-party frameworks and libraries are being used, such as React Native for the mobile application, MongoDB for data storage, that first could be seen as an unfavorable decision, but proved to be incredibly capable and AWS applications, being a perfect approach for file storage, management and administration. Researching best practices in database optimization led to the implementation of unique indexing strategies and clustering techniques, which significantly improved overall performance and user experience.

Communication skills also played an important role in refining Daykeeper's design and functionality. Since I wanted to create a platform that resonated with users, gathering feedback from various sources was essential. Engaging with online communities, participating in discussions on forums, and consulting with professionals helped shape many of the platform's key decisions. User testing provided valuable insights into how people interacted with the app, revealing areas that needed improvement. Based on feedback, I adjusted aspects of the user interface to make it more intuitive and streamlined. The ability to listen to different perspectives and incorporate suggestions into the design process greatly enhanced the quality of the final

product.

Problem-solving was a skill that I applied continuously throughout the development of Daykeeper. Many challenges arose during the project, each requiring careful analysis and strategic thinking to overcome. One of the most significant obstacles was optimizing the backend to ensure smooth performance. MongoDB, being a non-relational database, presented unique challenges in efficiently retrieving and storing user-generated content. Extensive testing and experimentation led to the implementation of unique and optimized query structures, reducing response times and enhancing overall performance. Security was another major concern, as protecting user data was a top priority. Researching best practices in cybersecurity led to the implementation of multiple layers of protection, including encryption, API security measures, and user authentication protocols.

Adaptability was another crucial skill that played a significant role in shaping the final version of Daykeeper. As the project evolved, new ideas emerged, and some original features needed to be modified or removed based on user feedback and technical feasibility. One example of this was the personalized reactions feature, which initially allowed users to create their own reactions to posts, similar to the app BeReal. However, after testing, it became clear that this feature added unnecessary challenges for the user and was replaced with a simpler “like” system, just like Instagram. Similarly, the Daily Question feature was introduced in the first versions of Daykeeper to encourage engagement, but it also proved unnecessary with time. The ability to make adjustments based on new information ensured that Daykeeper remained user-friendly and aligned with its original purpose.

Technological proficiency was another key factor in the development of Daykeeper. Learning to work with different programming languages, frameworks, and third-party APIs was essential in building a robust and scalable platform. React Native provided the foundation for the mobile application, while MongoDB served as the database for storing user-generated content. AWS S3 was integrated for media storage, ensuring that images and videos were efficiently handled, while using AWS Rekognition to filter this media. Implementing additional APIs, such as Google Locations API for location tracking and Firebase SDK for push notifications to the mobile application added functionality that improved the user experience. Each of these technologies required extensive research, testing, and hands-on learning to implement effectively.

Security implementation was another area where the application of skills was crucial. Before starting this project, I had minimal experience with cybersecurity, but the need to protect user data pushed me to research and apply advanced security measures. Multiple layers of validation were implemented for every request, ensuring that sensitive information remained protected. Different applications, such as Postman and Loctus were used to simulate different types of user traffic, create automatic tests to identify vulnerabilities and test how the system handled high user loads, allowing for optimizations that improved stability and performance. As a result of these security measures, Daykeeper was subjected to professional testing to ensure its resilience against potential threats.

Throughout the development of Daykeeper, the ability to learn new skills and apply them effectively was crucial to overcoming obstacles and refining the platform. Research, self-management, communication, problem-solving, adaptability, technological proficiency, and cybersecurity knowledge all played essential roles in shaping the final product. Each skill

contributed to a different aspect of the project, from conceptualization and design to implementation and security. The experience of applying these skills reinforced the importance of continuous learning and adaptability in software development. By using strategic thinking and user feedback, I was able to create a platform that met its objectives and provided a meaningful journaling experience for users. The knowledge and skills gained throughout this process will continue to be valuable in future projects, as they have strengthened my ability to handle complex challenges and develop innovative solutions.

Criterion C: Reflection

The founding of Daykeeper was a transformative experience that profoundly impacted my learning, growth, and understanding of software development, business, and user experience design. This project, which evolved from an initial idea to a fully functional application, allowed me to explore multiple domains, apply a variety of skill sets, and navigate the challenges of creating a product that is both technically sound and important to its users. The reflection on this process not only demonstrates how the project impacted my own development, but it also assesses the final product using the initial success criteria established at the planning stage.

One of the most significant impacts of this project was the deep understanding I gained in the field of software development. Prior to starting Daykeeper, my experience with building large-scale applications was limited. I had an understanding of coding and backend development, but this project required me to integrate various complex systems, optimize performance, and ensure a seamless user experience. The necessity of structuring a scalable backend using MongoDB forced me to explore advanced database management techniques, including indexing, clustering, and pipeline optimization. Learning how to implement efficient methods made the application more reliable and faster, improving the responsiveness of the platform. Without this project, I would not have been exposed to the depth of knowledge required to create a robust and efficient digital system.

Beyond technical expertise, DayKeeper fundamentally changed my understanding of business management. Since this was my first experience creating a real working business, I had to deeply understand and apply many different concepts. This included developing effective marketing strategies to communicate DayKeeper's unique value, clarifying the project's core purpose, transforming everyday moments into meaningful memories, and establishing a clear organizational structure with well-defined goals. Through building DayKeeper, I gained insights into the importance of user engagement, consistent branding, marketing and community growth. Additionally, managing this project taught me the necessity of adaptability and listening to user feedback to continuously improve the platform. This journey not only enhanced my skills as a developer but also provided me with valuable business experience in bringing innovative ideas successfully to life.

The impact of Daykeeper on my personal growth extends beyond technical skills. The project tested my perseverance, problem-solving abilities, and adaptability. There were numerous occasions where challenges seemed overwhelming, particularly in areas outside my comfort zone, such as design and business strategy. The ability to push through these difficulties, seek help when needed, and continuously iterate on the project was a crucial lesson.

Learning to ask for feedback, remain open to criticism, and adapt to changing needs was essential in refining the platform. The experience also reinforced my ability to conduct independent learning, as much of what I implemented in Daykeeper was the result of self-directed research, online courses and discussions with professionals in the field.

Evaluating the final product against the initial success criteria reveals that Daykeeper met most of its objectives while also highlighting areas for potential improvement. One of the primary goals was to create an intuitive and user-friendly journaling platform that allowed for quick and efficient entries. This objective was achieved through the integration of the Bullet Journal method, which enabled users to log their experiences concisely and meaningfully. The ability to include multimedia elements, such as images and videos, enhanced the platform's functionality and provided users with a dynamic journaling experience. The application's engagement features, including the option to interact with past entries and track emotions over time, contributed to its success in making digital journaling an interactive and reflective practice.

One area that could be improved is the modification of the Daily Question feature, which was intended to provide users with daily prompts to encourage engagement and self-reflection. While the feature was designed with the intention of fostering consistency in journaling, user feedback indicated mixed reactions. Some users found the daily prompts helpful, while others preferred a more open-ended journaling experience. Moving forward, the feature could be made more customizable, allowing users to opt-in for daily questions based on their preferences rather than having them as a default feature.

Another potential area of improvement involves further refining the social engagement aspects of Daykeeper. While the platform successfully integrates elements of social media, such as the ability to react to and engage with posts, more features could be introduced to foster community interaction without detracting from the primary purpose of personal journaling. Striking the right balance between privacy and social features remains an ongoing consideration, as users have different expectations when it comes to sharing personal reflections within a digital space.

Reflecting on the journey of developing Daykeeper, one of the most rewarding aspects of the project was seeing an idea evolve into a functional product that others could use and benefit from. The process of bringing a concept to life, solving real-world problems, and refining features based on user needs provided a sense of accomplishment that extended beyond technical skills. The experience reinforced my passion for creating meaningful digital tools that enhance daily life, and it has inspired me to continue exploring the intersection of technology, business concepts, and user engagement.

If I were to start this project over, I wouldn't change anything. Every challenge, adjustment, and iteration contributed to my learning and the growth of Daykeeper. The extensive research, the willingness to adapt, and the persistence in solving complex problems were all necessary steps in achieving the final product. Even the setbacks and difficulties encountered along the way were valuable lessons that contributed to my development as a developer, problem solver and professional.

The impact of this project extends beyond personal growth and skill development. It serves as a foundation for future endeavors, as the knowledge gained through Daykeeper can be applied to future projects related to business and development. The experience of building something from scratch, validating ideas and refining a product based on real-world application

has given me confidence in my ability to take on complex projects and turn them into reality. As Daykeeper continues to evolve, there will always be room for new features, optimizations, and improvements, but the core lessons learned throughout this journey will remain invaluable.

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Evidence

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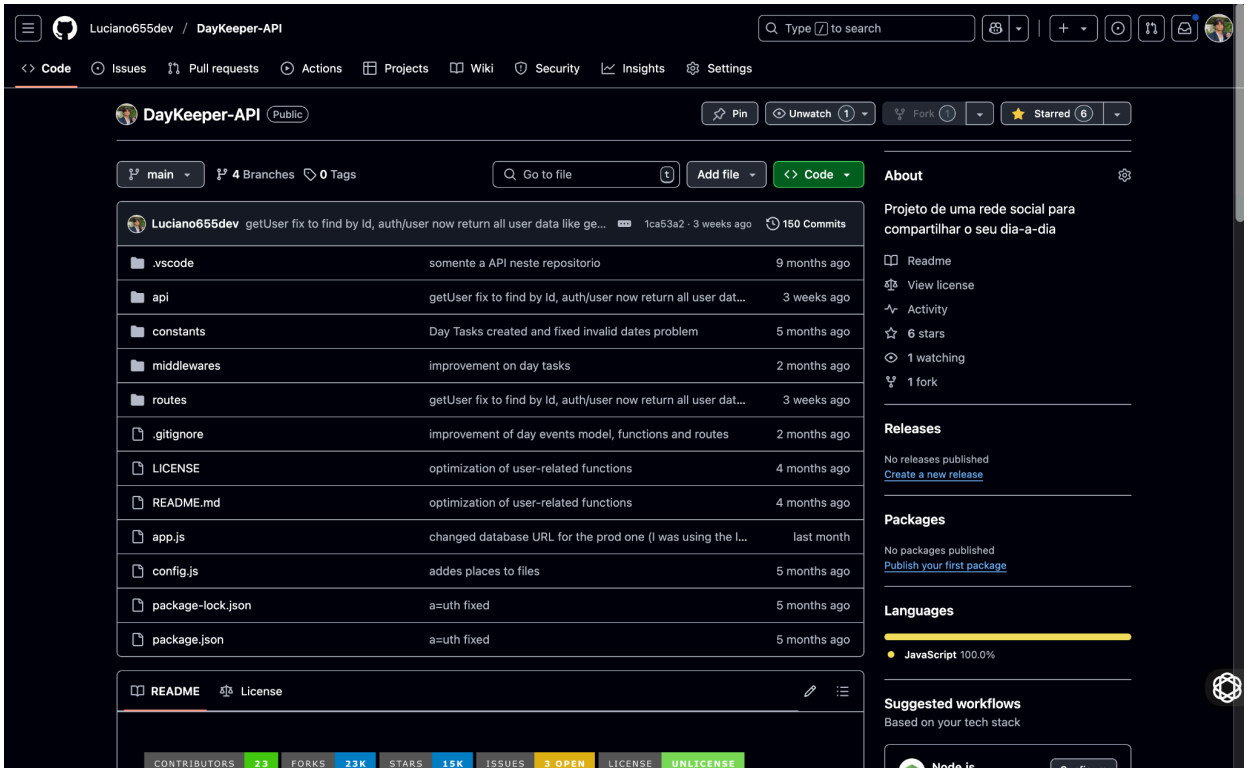
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.gitignore improvement of day events model, functions and routes 2 months ago
LICENSE optimization of user-related functions 4 months ago
README.md optimization of user-related functions 4 months ago
app.js changed database URL for the prod one (I was using the l... last month
config.js addes places to files 5 months ago
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