Documento de especificación de requisitos de software

My accounting agenda

BugBusters©

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1. Introduction

Managing a construction company is a task that requires a lot of effort and time on the part of the owners and managers. To facilitate this task, we propose the development of a management agenda for small businesses, which allows a more efficient management of daily operations including easier access to information, a key aspect in management, since physical information tends to get lost and can be disastrous, causing inefficient administration.

The advantage of implementing the aforementioned software instead of using traditional physical methods is greater efficiency and accuracy, since it automates and optimizes much better the processes that were performed manually, presenting less probability of human error.

Another important aspect is cost reduction, reducing the expenses associated with information management, such as hiring additional personnel for administrative tasks or the cost of paper and ink.

In general, the implementation of an information management software can bring numerous advantages in terms of efficiency, cost, accessibility, quality of customer service and security of all stored data.

1.1 Objective

Technological evolution is inherent to human beings, so developing tools that streamline the daily work process through proper organization and management habits allows the growth of the company and the workers involved. We can focus on complex administrative tasks, information management. With the data collected we can develop an application that responds to specific needs and is attractive to the target audience. This agenda is intended to be the right hand of those seeking to improve their organization, mobile and easy to access.

1.2 Public

The target customers of the product are people who manage small businesses, students and third parties who are looking for a timed and easy to understand note manager. The target customers are expected to have a deficit with technology to bring them a little closer to new tics.

1.3 Scope of the system

- Improve customer experience. The software will allow an easy and fluid interaction, offering a more personalized and pleasant experience according to the registration needs.
- Develop and implement a scalable, high quality software solution. As engineers, our role will be to design, build and maintain a software system that meets customer requirements and is scalable to meet future business needs.
- Follow software engineering best practices, including clearly defining requirements, using agile development methodologies, designing a scalable and maintainable architecture, and performing rigorous quality testing.

1.4 Acronyms and definitions

As the project progresses, there will be unanimous agreement among team members and potential customers to cover as many concepts as possible that may be new or complicated, and to add a concise and easy-to-understand definition for the general public. However, a privacy code must be maintained within the team, so acronyms that only the development team can understand are recorded during development.

1.5 References

Different bibliographies will be used that refer to the structuring of a good organization, user-friendly interfaces, the portability of the agenda, the progressive change of technologies

and, finally, documentation that provides the necessary information to identify the limits and opportunities of the product.

1.6 General presentation of the document

From here, we will expand in more detail on the requirements that have been identified and that the product will need to meet during and after development. Among the main ones, to mention, are security between the client and the records it makes, an easy-to-understand interactive interface, dependence on the device's internal clock, improved user experience with respect to the technology, minimum system requirements to run the program, and other needs that our product will have to solve.

2. General Description

In the work environment we are targeting, there is a wide range of customers, some more experienced than others with the new technological tools. Therefore, the product runs the risk of being mishandled if there is not a minimum of familiarity with the technological devices. Similarly, the main didactic features of the product employ dependency on new operating system functionality, running the risk of becoming obsolete if used on very old devices. By decoupling the dependency on device time information, an unexpected deconfiguration of the internal clock can compromise the product's automated functions if not backed up to the cloud via the Internet.

2.1 Product perspective

Desired implementations of the product will require the use of applications and libraries external to the source code and core components. This is due to the search for an all-in-one integration of the interactive diary, allowing it to differentiate itself from conventional text editors and data processors in a balance that offers greater ease of data manipulation while

extending traditional functions. For this reason, the customer will be required to enable the product to access basic device information as well as link to multimedia files.

2.1.1 System interfaces

The product is expected to have a strong encryption system for security that does not compromise customer privacy. It will be necessary to have a system interface that is easy to debug in case bugs are found over time, allows for maintenance or, in the near future, is sufficiently adaptable to new features and new requirements encountered by testers.

2.1.2 User Interfaces

After the system interface, the user interface must maintain the same level of security, or even higher, if you need to call the cloud. Although intended for small business owners, the content written to the address book files may be free will, and there will be customers who write important confidential information. For these and many other ethical reasons, the product must provide the most reliable system-user communication.

2.1.3 Hardware interfaces

It is of vital importance to make known the hardware interface used by the product, related to the interactive interface, given the progression of commands in various text editors. Thus, if ctrl+c is pressed, the product must be able to copy the selected information. Apart from the pre-existing key combination in different softwares, the identity of the product is sought through functionalities using the mouse to make more visible the actions that can be performed depending on whether the left button is clicked or dragged over it.

2.1.4 Software interfaces

The customer's first impression is left in the hands of the software interface, which should not only be eye-catching and friendly with the functionalities it offers, but also descriptive

enough to keep the user's curiosity to discover all the options available to him. To attract more people, the product must be customizable, as if it were a physical agenda, where the customer can feel more comfortable with the format while it is running.

2.1.5 Communication interfaces

The communication interface must be, in a word, efficient. A slow connection between the client's files and the cloud can not only be frustrating, but can also corrupt the files, either by a half-hearted download or by a call to the wrong file. Since time information is one of the cornerstones of the program, exceptions are needed to prevent the client from accessing the program if it has the wrong time set.

2.1.6 Memory restrictions

Each notebook entry will be stored in the internal memory of the client's device, so the size of the product will increase according to the number of entries. It is necessary for the program to be able to use the device cache, both to open the annotations faster and to better manage storage. It is intended that when dealing with pure text, the files created can be easily saved as .txt, while if multimedia files are used in the annotations, they can be compressed or cloud storage can be used instead.

2.2 Product characteristics

Broadly speaking, the product is an electronic tool that allows people to organize their time and manage their activities more efficiently. Enhancing the functionality of its physical version are the main features such as scheduling and viewing appointments, meetings and events, as well as setting reminders and alarms so as not to forget them. An interesting feature is that it allows you to create to-do lists and organize them by priority, deadline and category, as well as

assign them to specific projects. In short, it can include a wide variety of functions to adapt to the needs and preferences of each client.

2.3 User functions

The target user must have some minimum requirements to get the most out of the program, such as patience and typing speed, the correct way to install programs and some basic commands for text editors. In addition, skills that depend on the type of user are required, if any, such as good reading comprehension and curiosity to make the most of everything the product has to offer.

2.4 Restrictions

For better optimization and efficiency of the product, it is necessary to restrict the installation of the product on devices that have stopped receiving operating system updates. On the other hand, regarding the linking of annotations to the cloud, if it is not verified that the user is the same owner of the cloud account, it is necessary to restrict access permissions to avoid ghost accounts that try to collect data from other users.

2.5 Assumptions and dependencies

Again, the product's dependence on the device clock is emphasized. Highlighting other functionality, cloud saving will depend entirely on the connected digital repository. As for the keyboard functionality, there are specific cases where the executed commands depend on the keyboard language, so a generalization of the functions by keyboard commands is necessary to avoid execution failures.

2.6 Future needs

Although the product could access the customer's cloud, it is intended for personal use with a wider range of customizations. However, as the acquisition of servers and database

programming becomes possible, there is a vision of the product's own cloud for higher level companies, coming to be considered a collaborative workspace among several team members with greater and more agile data manipulation. Even so, in this version there are requirements that will be implemented in the future, either by changing parameters in the code due to obsolescence, optimization of both execution and storage and continuous maintenance of errors and bugs.

3. Specific requirements

For the correct fulfillment of the requirements of the product "my accounting agenda" (codename of the project), it will be necessary for the developers to be fully committed to good programming, to maintain the confidentiality of the product until the maintenance phase and to prevail professional ethics when writing their own code. Once the developer's role in the project has been clarified, the functional and non-functional requirements of the software are listed in detail:

3.1 Functional requirements

- Functionality: The "agenda" product should have various functions, such as check-in, calendar, tasks and notes, so that users can organize their time and activities effectively.
- Accessibility: The "agenda" product must be easily accessible from different devices and platforms, such as computers with different technical characteristics and must be compatible with different operating systems.

- Synchronization: The "agenda" product should be able to automatically synchronize through the cloud, allowing users to access information anytime, anywhere.
- Customization: The "agenda" product should allow customization of the notes, allowing users to change the colors, themes and styles of the data according to their preferences for greater identity with the product.
- Reminders: The "agenda" product should have the ability to set reminders for important events and deadlines according to the present date, in other words, it must show what events and tasks are pending.
- Information sharing: The digital "agenda" product should allow information sharing between files on the user's device, which would allow different files to be collected in a single program.
- Security: The "agenda" product must ensure the security of personal and business information stored in the application, using advanced security measures to protect user data.
- Business rules: The “agenda” must calculate the budget and Cost per meter according to the items needed correspondingly.

3.2 External interface requirements

- Intuitive design: The "agenda" product interface must be easy to use and understand, even for users who are not familiar with the technology.
- Customization: The "agenda" product customization tool should allow users to customize the graphical and typing interface to suit their needs, such as changing the background, font or shortcuts.
- Accessibility: The "agenda" product interface must be accessible to users with visual or hearing impairments, and must be compatible with assistive tools such as screen readers.
- Integration: The "agenda" product must be able to integrate device and application access permissions to facilitate information management, such as synchronization with the cloud or integration with the calendar.
- Usability: The "agenda" product must be easy to learn to use, with clear and logical navigation, using clearly identified buttons and menus with concrete descriptions of their function.
- Stability: The interface of the "agenda" product must be stable and reliable, avoiding errors, crashes or obsolescence that prevent the temporary or definitive use of the software.
- Responsive design: The interface of the "agenda" product must be responsive, i.e. adaptable to different screen sizes, to ensure that the tool is easy to use on both desktops and laptops.

3.3 System characteristics

- Data storage: The "agenda" product must be able to store and manage both multimedia and a large amount of data. This will optimize the management of events and tasks.
- Data security: The "agenda" product must have security protocols with each saved entry to protect the stored data, such as data encryption and secure passwords.
- Offline functionality: The "agenda" product must have the ability to work offline, so that users can access and modify information even when they are not connected to the Internet, using the cache to synchronize changes to the cloud when it comes back online.
- Systematization: The features of the "agenda" product may vary depending on the specific needs of each operating system. However, it must be able to display the most similar interface for the user in order to facilitate the management of information on different devices.

3.4 Non-functional requirements

- Performance: The "agenda" product must have optimal performance in terms of response speed and information loading times with low latency.
- Scalability: The "agenda" product must be able to handle a synchronous volume of data and users in the cloud without affecting its performance or stability.
- Reliability: The "agenda" product must be reliable and consistent with respect to all primary and secondary operations, avoiding unexpected errors and failures.
- Maintenance: The "agenda" product must be easy to maintain and update all parameters, with a scalable and modular architecture that facilitates the incorporation of new functionalities.

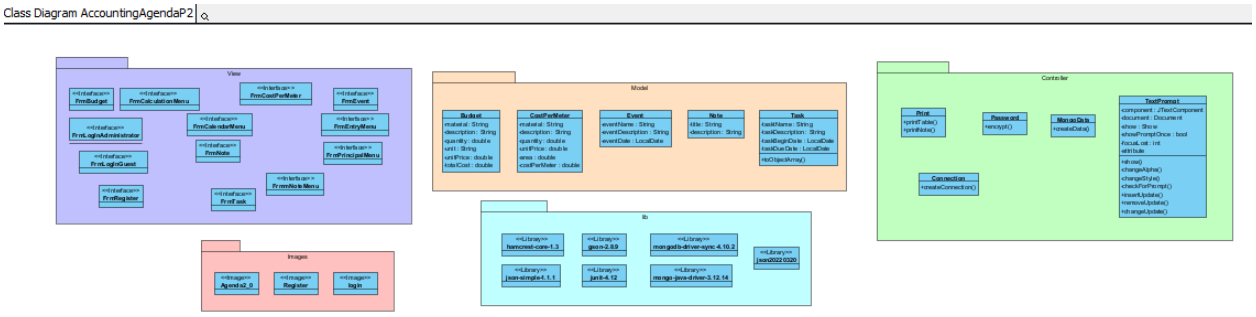
- Availability: The "agenda" product must be available and available to users at all times, avoiding service interruptions and ensuring business continuity.

4. Appendices

At the time of writing this version of the software requirements specification document, there are no optional appendices to expand the information presented either statistically or graphically. At the moment of presenting the project approach and reaching more target customers, the respective statistical documentation will be attached that will allow visualizing the formats established between programmer-client.

5. Diagrams

5.1. Class Diagram



5.2. Use Case Diagram

6. Creators

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