Университет ИТМО

Факультет программной инженерии и компьютерной техники

Методы и средства программной инженерии. Лабораторная работа №1. Software Requirements Specification

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1 Введение

1.1 Цель

[Specify the purpose of this SRS. The SRS should fully describe the external behavior of the application or subsystem identified. It also describes nonfunctional requirements, design constraints and other factors necessary to provide a complete and comprehensive description of the requirements for the software.]

Цель - создание сайта для международного аэропорта Домодедово, расположенного в городе Москва. Требования к сайту описаны ниже.

1.2 Краткая сводка возможностей

[A brief description of the software application that the SRS applies to; the feature or other subsystem grouping; what Use-Case model(s) it is associated with; and anything else that is affected or influenced by this document.]

Сайт должен давать возможность отслеживания всех рейсов вылетающих из/прибывающих в аэропорт Домодедово, поиска полетов по их параметрам и атрибутам, прочтения новостей, связанных с аэропортом, отслеживания состояния аэропорта и услуг, которые он предоставляет. Также разрабатываемое решение должно предоставлять услугу бронирования и приобретения авиабилетов, отображения избранных рейсов клиента и обратную связь с представителями Домодедово.

1.3 Определения, акронимы и сокращения

[This subsection should provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS. This information may be provided by reference to the project Glossary.]

TODO: Заполняем по ходу или уже в готовом варианте

1.4 Ссылки

[This subsection should provide a complete list of all documents referenced elsewhere in the SRS. Each document should be identified by title, report number (if applicable), date, and publishing organization. Specify the sources from which the references can be obtained. This information may be provided by reference to an appendix or to another document.]

ТООО: Я так понял, что на то, что поможет в создании сайта.

1.5 Обзор

[This subsection should describe what the rest of the SRS contains and explain how the document is organized.]

2 Общее описание

[This section of the SRS should describe the general factors that affect the product and its requirements. This section does not state specific requirements. Instead, it provides a background for those requirements, which are defined in detail in Section 3, and makes them easier to understand. Include such items as: - product perspective - product functions - user characteristics - constraints - assumptions and dependencies - requirements subsets]

3 Технические требования

3.1 Функциональность

[This section describes the functional requirements of the system for those requirements which are expressed in the natural language style. For many applications, this may constitute the bulk of the SRS Package and thought should be given to the organization of this section. This section is typically organized by feature, but alternative organization methods may also be appropriate, for example, organization by user or organization by subsystem. Functional requirements may include feature sets, capabilities, and security.

Where application development tools, such as requirements tools, modeling tools, etc., are employed to capture the functionality, this section document will refer to the availability of that data, indicating the location and name of the tool that is used to capture the data.

3.2 Удобство использования

[This section should include all of those requirements that affect usability. For example, - specify the required training time for a normal users and a power user to become productive at particular operations - specify measurable task times for typical tasks or base the new system's usability requirements on other systems that the users know and like - specify requirement to conform to common usability standards, such as IBM's CUA standards Microsoft's GUI standards]

3.3 Надежность

Requirements for reliability of the system should be specified here. Some suggestions follow:

- Availability—specify the percentage of time available (xx.xx%), hours of use, maintenance access, degraded mode operations, etc.
- Mean Time Between Failures (MTBF) this is usually specified in hours, but it could also be specified in terms of days, months or years.
- Mean Time To Repair (MTTR)—how long is the system allowed to be out of operation after it has failed?
- Accuracy—specify precision (resolution) and accuracy (by some known standard) that is required in the system's output.
- Maximum Bugs or Defect Rate—usually expressed in terms of bugs per thousand of lines of code (bugs/KLOC) or bugs per function-point (bugs/function-point).
- Bugs or Defect Rate—categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a "critical" bug; for example, complete loss of data or a complete inability to use certain parts of the system's functionality.]

3.4 Производительность

[The system's performance characteristics should be outlined in this section. Include specific response times. Where applicable, reference related Use Cases by name.

- response time for a transaction (average, maximum)
- throughput, for example, transactions per second
- capacity, for example, the number of customers or transactions the system can accommodate
- degradation modes (what is the acceptable mode of operation when the system has been degraded in some manner)
 - resource utilization, such as memory, disk, communications, etc.

3.5 Поддерживаемость

[This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, maintenance utilities.]