Университет ИТМО

Факультет программной инженерии и компьютерной техники

Направление подготовки 09.03.04 Программная инженерия

Дисциплина «Методы и средства программной инженерии»

**Отчет**

По лабораторной работе №1

Вариант 1704

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Задание:

**Вариант №1704:** Справочная служба - 008.ru. Информация о товарах, услугах, акциях и новостях компаний Санкт-Петербурга. Телефонные коды городов и стран - [http://www.008.ru](http://www.008.ru/" \t "_blank)

Составить список требований, предъявляемых к разрабатываемому веб-сайту (в соответствии с вариантом). Требования должны делиться на следующие категории:

* Функциональные.
  + Требования пользователей сайта.
  + Требования владельцев сайта.
* Нефункциональные.

Требования необходимо оформить в соответствии с шаблонами RUP (документ SRS - Software Requirements Specification). Для каждого из требований нужно указать его атрибуты (в соответствии с методологией RUP), а также оценить и аргументировать приблизительное количество часов, требующихся на реализацию этого требования.

Для функциональных требований нужно составить UML UseCase-диаграммы, описывающие реализующие их прецеденты использования.

**Отчёт по лабораторной работе должен содержать:**

1. Документ Software Requirements Specification, содержащий список требований к сайту.
2. UseCase-диаграммы прецедентов использования, реализующих функциональные требования.
3. Выводы по работе.

**Вопросы к защите лабораторной работы:**

1. Методологии разработки ПО. Унифицированный процесс.
2. Требования и их категоризация. Атрибуты требований.
3. Язык UML.
4. Прецеденты использования. UseCase-диаграммы - состав, виды связей.

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**Software Requirements Specification**

1. **Introduction**
   1. **Purpose**

The purpose of establishing this website is to provide citizens with a place to look up information about goods and services in Petersburg（Information includes but not limited to food, entertainment, car, furniture, etc.）The implemented subsystems include information query and retrieval functions, and map navigation functions. The non-functional requirements of the website include the stability of running 7\*24 hours, the high concurrency feature that can be accessed by a large number of users at the same time, and the security against hacking, etc

* 1. **Scope**

This software requirements specification applies to the 008 web application

**1.3**  **Definitions, Acronyms, and Abbreviations**

Справочная информационная система 008

**1.4**  **References**

<http://www.008.ru>

1. **Overall Description**

This product provides travel and transportation assistance for all citizens living in Peterborough. It should be able to provide citizens with information on all modes of transportation in the city, such as routes, recent news, etc. Once logged in, users can save the information they need for easy access again. Information should be presented as simply and clearly as possible. The product should be able to be updated in the future according to market demand. For example, when you are about to go to a place that you have not been to and do not know, you just need to look for it in the specific category on the website and read the information in it.

1. **Specific Requirements**

**3.1**  **Functionality**

**3.1.1 User Functions**

**3.1.1.1** Provides the function of searching for specific information on goods and services in Petersburg, such as contact information, service content, address information and working hours, etc.(information includes but is not limited to food, entertainment, cars, furniture, etc.)

**3.1.1.2** Provide information about promotions and discounts, including the conditions under which the discounts can be used, and how much the discounts are

**3.1.1.3** Provide company information, including company services, principles, history

**3.1.1.4** Provides the ability to look up the telephone codes of countries and cities in the world, and there are tutorials on how to call various regions from domestic or foreign countries

**3.1.1.5** Provides the ability to freely search for information on various products and places, including keyword searches

**3.1.1.6** Provides the ability to view the current specific date

**3.1.1.7** Provides the ability to add a company to the webpage, the process is: submit the application form and wait for contact (fees apply)

**3.1.1.8** Provides the ability to provide feedback, submit an application form and write feedback there

**3.1.2 Administrator Functions**

**3.1.2.1** Provides permission to add, edit and delete information, such as company address and profile, discount time and strength, phone code, etc., and to add tags

**3.1.2.2** Provides the ability to delete features or information users don't like, update and optimize existing features or pages, and add new features (pages)

**3.2 Useability**

Usability requirements include, easy-to-understand icons, eye-catching text titles and pictures, detailed introductions, internationalization, suitable for different users of different ages

**3.2.1** Easy-to-understand icons:

Easy-to-understand icons, users can immediately understand the meaning of the icon and the function of the location of the icon after seeing the icon

**3.2.2** Eye-catching text titles and pictures:

Eye-catching text and pictures are easy to read for the elderly and visually impaired

**3.2.3** Detailed introductions

The detailed introduction is convenient for users to understand the website background, purpose, usage instructions and functions of each module.

**3.2.4** Internationalization

Meet i18n requirements, convenient for foreign tourists

**3.3 Reliability**

Reliability requirements include search accuracy, high server availability, mean time to repair, mean time between failures

**3.3.1** Search accuracy

The accuracy of the search includes the accuracy of the search news, the accuracy of the search map and directions

**3.3.2** High server availability

Server availability refers to a system that is specifically designed to reduce downtime while keeping its services highly available (always available).

**3.3.3** Mean time to repair and Mean time between failures the shorter the better

**3.4 Performance**

Performance requirements include, response time, throughput, etc.

**3.4.1** Response Time

The response time of the website should be under 100ms in the St. Petersburg area.

**3.4.2** Throughput

For a city with a population of 5 million in St. Petersburg, the throughput must meet at least 10,000 simultaneous visits

**3.5** Supportability

**3.5.1** Coding Standard: UTF-8

**3.6 On-line User Documentation and Help System Requirements**

robots protocol: https://008.ru/robots.txt

**3.7 Licensing Requirements**

Privacy License Agreement

**3.8 Legal, Copyright, and Other Notices**

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| --- | --- | --- | --- | --- |
| **№** | **Requirement** | **Priority** | **Labor intensity man-hour** | **Stability** |
| 1 | View or edit or filter information within the site | 10 | 8 | High |
| 2 | Filter information by tags and topics | 10 | 10 | High |
| 3 | Короткая сводка на главное странице | 7 | 2 | High |
| 4 | add comment | 8 | 4 | Medium |
| 5 | Search function | 8 | 8 | Medium |
| 6 | report bug | 4 | 2 | Medium |
| 7 | Get maps and addresses | 8 | 8 | High |
| 8 | Site Notes | 4 | 2 | Low |

