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**Online Research Optimizer**  
[Extension for Google Chrome Browser to manage collected web information]

## **Software Requirements Specification**

**Version 1.0**

Online Research Optimizer	Version: 1.0
Software Requirements Specification	Date: 31/07/2013
Initial Software Requirements Specification	

## Revision History

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# Software Requirements Specification

## 1. Introduction

As a student, Undergraduate, post graduate , researcher or anyone who seek information from world wide web , accessing web content which provided in various web sites is an essential part. Most often what happens is people tend to copy the wanted content parts (ex : paragraph , sentence .. etc) to an external source like word document. And some tend to save the web page for future reference. Gathering and analyzing the basic requirements of the project and giving a brief description in done here.

### 1.1 Purpose

To give an overall description about the Google Chrome Online Research Optimizer. This will explain the requirements of the Extension such as basic functionality, usability, reliability, performance , supportability and design constrains.

### 1.2 Scope

This report covers the developing process of the "Online Research Optimizer". This development case applies to the Inception, Elaboration, Construction, and Transition phases of the project and this would give an overview of the methods and major artifacts which would be used in the development process.

### 1.3 Definitions, Acronyms, and Abbreviations

1. RUP-Rational Unified Process
2. VP-Visual Paradigm
3. ORO - Online Research Optimizer
4. GC - Google Chrome

### 1.4 References

- Online Research Optimizer -Project Feasibility Document
  - Online Research Optimizer -Project Vision Document
  - Online Research Optimizer -Project Schedule
- [0] <https://developers.google.com/chrome/>
- [1] <https://plus.google.com/+GoogleChromeDevelopers/about>
- [2] [https://developer.chrome.com/extensions/api\\_index.html](https://developer.chrome.com/extensions/api_index.html)

### 1.5 Overview

Software requirements and the specific detailed description of the functionalities of the GC ORO are described in this document.

## 2. Overall Description

As a student, Undergraduate, post graduate , researcher or anyone who seek information from world wide web , accessing web content which provided in various web sites is an essential part. Most often what happens is people tend to copy the wanted content parts (ex : paragraph , sentence .. etc) to an external source like word document. And some tend to save the web page for future reference.

A solution would be to provide an application (Online Research Optimizer(Extension for Google Chrome[2]) )which help them to manage and organize their collected information online and offline as well through the web browser.

GC ORO is an easy to use browser extension and the user level of computer literacy is not a huge barrier.

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The user requirements are identified well and they are analyzed in the user perspective and the product perspective as well.

### 3. Specific Requirements

#### 3.1 Functionality

There are several functionalities in this application and those are described briefly below .

##### 3.1.1 ***Activate/Deactivated the browser extension when needed.***

The GC ORO will be installed to the GC browser and it will be displayed on the tool bar using an icon. By clicking that user can activate and deactivate the extension.

##### 3.1.2 ***Select and highlight a text area which user prefers***

User can select a text area and highlight the area using a color. Normally this is the same feature as PDF highlighting.

##### 3.1.3 ***Add a caption/annotation to a highlighted text***

User can add an annotation / caption to the text which is highlighted and can edit and remove it as user wants.

##### 3.1.4 ***Save the web page in the local hard disk***

User can save the web page in the local hard disk.

##### 3.1.5 ***Select and Load a saved web page***

User can select a saved web page and open it and view it.

#### 3.2 Usability

##### 3.2.1 ***set of easy to use features***

All the functionalities are very easy to use. It is just a matter of several clicks.

#### 3.3 Reliability

##### 3.3.1 ***Low failure rate***

The failure rate of the extension is very low and browser will not overloaded by this extension.

#### 3.4 Performance

##### 3.4.1 ***Resource utilization***

The browser will not get overloaded and the required hard disk space for the downloaded files is depends on the user actions.

##### 3.4.2 ***Low Response time***

The response time is very low and it is almost real time.

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### **3.5 Supportability**

#### **3.5.1 Editable and Expandable code**

The code is very easy to read and understand and future expansions and modifications are allowed and the required code standards and ethics are followed.

### **3.6 Design Constraints**

#### **3.6.1 Programming languages**

The extension has been developed by java script , HTML, jQuery , CSS , XML languages. And Chrome tools and tutorials and standards are used for develop the extension.

### **3.7 On-line User Documentation and Help System Requirements**

Online User Documentations/ manuals will be provided with the deliverables. And the code project is also available in the GitHub account also.

### **3.8 Interfaces**

#### **3.8.1 User Interfaces**

A pop up html page will be there to help the user to select a saved web page, and do the necessary changes

#### **3.8.2 Software Interfaces**

GC browser API's are used to combine the extension and the browser.

#### **3.8.3 Communications Interfaces**

GC browser API's are used to communicate with the extension. The inputs for the processes are requesting from the browser API's and the standards for the communications are strictly followed.

### **3.9 Licensing Requirements**

This extension is provided to the GC user as a free extension. And the code will be available to the developers online. Because of this the license requirements are not relevant and it will be not an issue.