

**MITTUNIVERSITETET**

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7,5hp]

**[ Issue Tracker ]**

[ Web development process of an issue tracker ]

**[ Nordin Suleimani ]**

## Summary

This project report document engulfs the process of developing a website using the languages HTML, CSS, JavaScript, and PHP. For this last assignment given to us during a web programming course at Mid Sweden University I have chosen to build an issue/bug tracker that is meant to be used as an inhouse tracker tool for a developer or a group of developers. The main goals of the issue tracker are that users can register with different roles, admin/moderator/user, the ability to create, edit and delete issues and comments. As my initial step I start by gathering information, I do this by getting inspired by looking at well-regarded and prominent issue trackers. The previous step led me into a brainstorming phase which further outlined my minor goals. After defining the target audience, I could precede with pinning down the structure, navigation, and the design language. Lastly, I delve into the technical details, which boils down to me focusing on a specific feature and figuring out possible solutions and how I go about tackling the problem. As to the result I am happy...

**Keywords:** Web development, design, PHP, JavaScript, CSS, HTML, Database.

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# Terminology

## Abbrevations & Acronyms

ACK	Acknowledge. Kvittering av korrekt överfört meddelande.
CRC	Cyclic Redundance Check. Felupptäckande kod.

# 1 Introduction

In 1946 a group of scientists traced an issue in their software down to literally a moth being trapped in a hardware relay, which now we refer to as bugs when we are faced with issues such as errors and glitches in software.

Even though software in part contributes to the development of society and our daily lives, a 2002 study in the US has shown that there is a huge amount of economic backlash from poorly developed software.

Rest assured, just like real bugs that can overcome radiation, harsh environments, or human endeavors to combat unwanted bugs through pesticides some software bugs are hard to find and get rid of. Nonetheless an issue/bug tracker can help to mitigate this problem.

## 1.1 Purpose

The main purpose with this project assignment is to apply the experience and knowledge gathered during the course's different moments. That is to build a website with HTML, CSS, JavaScript and PHP. The second purpose of this project is to accommodate with a well-documented report that outlines the process of the web development, choices made and a discussion about possible future improvements.

## 2 Method

Lorem ipsum dolor sit amet.

Chapter 3 will cover the nitty gritty of this project, hence it was my first concern to figure out what this chapter would consist of. I did this by reading about web development processes and steps, the following sub-chapters are what I figured was sufficient for this project.

Given that the final product is meant to be used by a developer or a group of developers and that the issue tracker will be available on the internet, one of the main goals is to have a user registration system, hence the possibility of user roles such as admins/moderators/users. Second goal is to have a neat way of posting issues to the site and lastly, those issues can be commented on and comments may have sub-comments.

To aspire we sometimes need to get inspired; I do this step not only to get hints on how to do layout and design but also what minor features I might want to add.

```

graph LR
    IT((Issue tracker)) --- WS[WebSite Setup]
    IT --- V[Views]
    IT --- IC[Issue Comment]
    IT --- I[Issues]
    IT --- LR[Login/Registration]

    WS --- WS1[Admin, with monitoring the sales database info]
    WS --- WS2[Admin, create role]
    WS --- WS3[Admin, generate CSV list]
    WS --- WS4[1. Filter, generate CSV list]
    WS --- WS5[2. Input custom info: description, status, priority]
    WS --- WS6[Setup impact role]
    WS6 --- WS6a["* PROJECTS"]
    WS6 --- WS6b["* Project description"]

    V --- V1[3 Dash boards]
    V --- V2[Assigned to me]
    V --- V3[Planned by me]
    V --- V4[Commented by me]

    IC --- IC1[Feedback]
    IC --- IC2[Self comments]
    IC --- IC3[Post date]
    IC --- IC4[Post content]
    IC --- IC5[Flagged X]

    I --- I1[Sub-category]
    I --- I2[Description/Title X]
    I --- I3[Attachments]
    I --- I4[Priority]
    I --- I5[Type]
    I --- I6[Manager]
    I --- I7[Date]
    I --- I8[State changed]
    I --- I9[Filter]

    LR --- LR1[Forgot password]
    LR1 --- LR1a[Can change email]
    LR1 --- LR1b[Allow user]
    LR1 --- LR1c[Change password]
    LR --- LR2[User profile]
    LR2 --- LR2a[User profile]
    LR --- LR3[Encrypted password]
    LR --- LR4[New user registration]
    LR4 --- LR4a[Admin can add new user or a list of users who can create reports and control all reports data]
    LR4 --- LR4b[Added users received an email to login to register and login further details]
    LR --- LR5[Start roles]
    LR5 --- LR5a[Can log in to system]
    LR5 --- LR5b[Only admin can create and delete roles]
    LR5 --- LR5c[Administrator can assign roles]
    LR5 --- LR5d[Only administrator can assign priority, status, date or assign issues]
  
```

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### **3.3 Target audience**

The target audience is not restricted to any age group or demographic but simply consists of software developers, thus a toned-down without any distracting bells and whistles UI will be the approach.

### **3.4 Structure/navigation**

Figure 2 depicts the sitemap, note that the red rectangles are only shown to and can be accessed by admins.



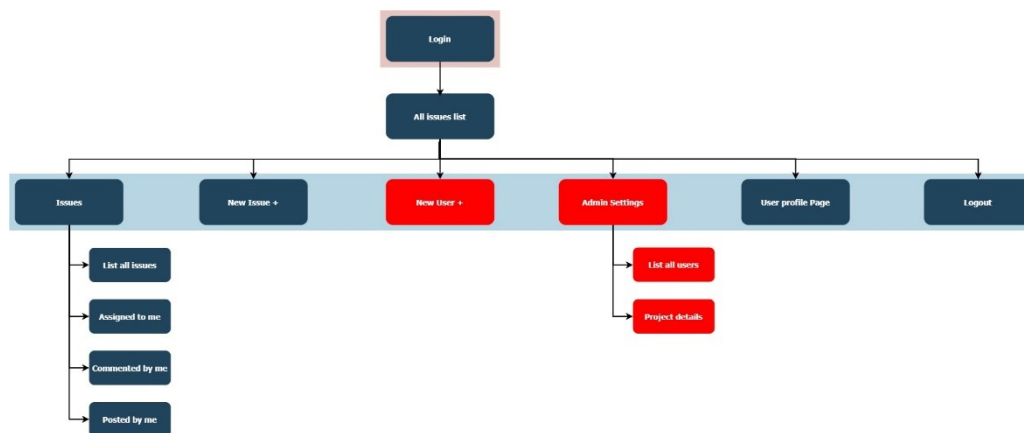
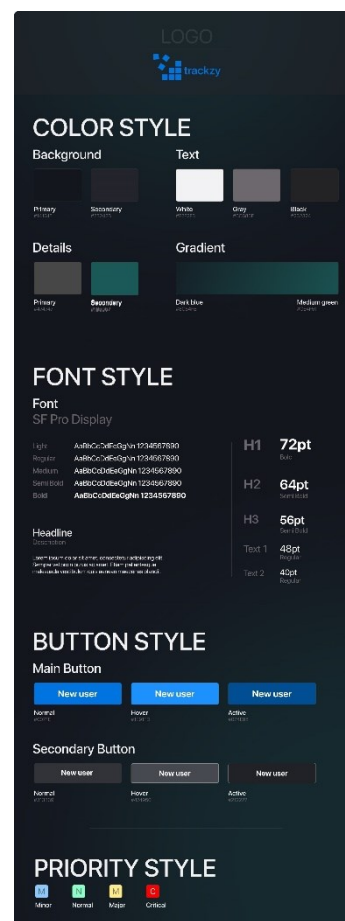


Figure 2, Sitemap

### 3.5 Design language/layout

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur tristique velit nisi, ut rutrum enim pellentesque nec. Vestibulum maximus euismod massa, vel rhoncus lacus. Morbi erat urna, aliquam nec nisi malesuada, semper euismod lacus. Nulla venenatis justo id nisi pellentesque congue. Fusce vitae nisi vel ante semper feugiat. Donec tincidunt augue vitae justo blandit, porttitor hendrerit tortor vehicula. Ut porta porttitor feugiat. Maecenas venenatis pellentesque finibus.

Quisque ornare pellentesque turpis quis aliquet. Pellentesque a sagittis dolor. Donec varius dolor in ex eleifend, ut feugiat quam semper. Etiam blandit dictum pretium. Praesent porttitor volutpat ligula. Vestibulum porttitor tortor vel sem elementum, eu elementum nisi ornare. Curabitur vehicula auctor scelerisque.



### **3.5.1 Mockups**

## **3.6 Technical details**

About script languages and frameworks

### **3.6.1 Authentication and Authorization**

#### **3.6.2 User profile**

#### **3.6.3 Issues**

#### **3.6.4 Commenting**

#### **3.6.5 Database**

#### **3.6.6 Visually impaired solution**

#### **3.6.7 WCAG guideline**

## 4 Result

Lorem ipsum dolor sit amet.

## 5 Conclusions

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## 6 Reference

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