Klintist Dyrmishi

SmartStyle Software Engineering Project

Applying dependability requirements on our website.

Availability : The system that we will create for SmartStyle should be active 24/7, and it will be reachable to anyone who owns a digital device like a phone, laptop, desktop, Ipad etc. We won't limit the accessing by only one browser even though google chrome is the most used browser we will be available also on moxilla, microsoft edge, safari etc. In this way people won't feel limited on the offered ways to access the website. The website will be used by customers but also by the staff and admins which means it will be available in 2 languages Albanian and English and also considering that there is sensitive data we will try to avoid any failure in the system which will make it go down be it scheduled or unscheduled maintance.

Monitoring and control : Monitoring and Controlling are processes needed to track, review, and regulate the progress and performance. It also identifies any areas where changes are required and initiates the required changes. In case of any error the admin and users will all be notified with paritcular notifications where they will be notified for how long the system will be down. The system will be build to be reliable and trustworthy.

Maintenace : It appears after the user has created his/her account on SmartStyle. Maintance is basicaly making sure that the system works correctly. It is easier to maintain the system with high quality coding which is easily readable. The website will be built in a way which can be ever updated and extanded with new fetaures which will keep SmartStyle ever interesting.

Maintainability : Software maintainability is defined as the degree to which an application is understood, repaired, or enhanced. Understanding software maintainability allows us to identify improvement areas as well as determine the value supplied by current applications or during development changes. We will also be able to update and extand or change our features easily.

Operations :   summerised from the text before.

The SmartStyle software should be 24/7 online.

Users are all able to login in the system of SmartStyle.

Their passwords will be encrypted and impossible to be accessed by someone else.

All the data will be secured in the system.

Admin or any authorised user will be able to edit,delte or change information.

Threats and error removal :

- **Fault Prevention:** deals with prevention faults being incorporated into the system. This can be accomplished by development methodologies and good implementation techniques.

- **Fault Removal:** it can be divided into two sub-categories: **Removal During Development** and **Removal During Use.**

- **Removal:** during development verification is required so that faults can be found or detected and removed before the system is put in production. Once systems has been put in production than we need another   system to record failures and remove them via a maintenance cycle.

- **Fault Forecasting:** predicts likely faults so that they can be removed or their effects can be prevented.

Applying Security requirements on the website:

Authentication and password management : Authentication and password are the some of the most important requirements that we will apply on our website. This will be the best way to be a trustworthy website. Authentication will always notify the user if something is wrong or not valid and according to the password we will try and make it invisible in the database like showing asterix "*" instead of numbers and letters. This way the password will be protected all the time and known only by the user. There will be a function that will check if :

- Your email is valid.

- Your password is valid.

- Your username is valid.

If they are not than there will be a warning that the username or password is not correct.

Authorization and role management : Authorisation and role management will seperate the users from employees and administrators where every account will have their limits with administrator being the main account which has access in the databases. It will allow us to add new employees, to inform us when a time is scheduled for which emplyee, all this ofcourse will be accessed by administrator or authorised users.

Audit logging and analysis : By logging we mean recording information which is not sensitive or has anything to do with the privacy of the user. For example how active an account is in our website or which part of the website is used less than the other parts in order for us to improve it. Auditing, however, is more complex. Auditing is the practice of inspecting logs for the purpose of verifying that the system is in a desirable state or to answer questions about how the system arrived at a particular

state. In this way we will be able to see where our website stands and how well it is going and how we can improve on certain fragments or even extend our system.

Network and data security: Network and data security means that we need to protect our data and information from being infected or reached from a third party. This is a worldwide problem and customers get more and more aware of this issues and demand their privacy protected and defended which is one of the main points we will focus on our site.