**Non-functional Requirements**

**Reliability**

Definition of a failure:

The website crashes, which means it stops serving data.

The crash could happen for the following reasons.

1. Code errors

The developer does something wrong while doing maintenance or updating the website. To avoid this, the developer should make sure the website works in a correct way before publishing changes.

1. Plugin/Extension Error

This happens when the plugin/extension added to the website is not stable enough.

To avoid this, the developer should make sure to cache to clear as much unwanted data as possible. This decreases the processing load on the server, which reduces the strain on plugins.

1. Service provider error

This error is caused by server troubles of the host provider.

When this happens, the website manager has to wait for the server to recover.

1. Hosting error

The website goes down because there is not a large enough hosting plan.

The developer should check the expiration date of the hosting plan and make sure it never expires.

1. Domain error

If the domain expires, the website will no longer apear online.

To avoid this, the developer should check the expiration date of the domain and make sure it never expires.

1. Traffic error

This error happens when too many people try to visit the website at once.

To avoid this, the developer should make use of a CDN(Content Delivery Network) to deliver static content to users much faster.

The consequence of the website crash is that the call center operator will not be able to view or put in the new incidents in the database and the department officers will not be able to view, check or update the status of the incidents or send updates on social media. This will leave the crises across the country unmonitored.

Error Detection:

Check if the website is down on <http://www.isitdownrightnow.com/> with the url of the website.

The MTBF(Mean Time Between Failures) must be less than or equal to 0.01h.