**4.1.4. References**

1. Teklebirhan Ambaye Construction project management template

2. Software engineering Ian Sommerville text book

3. [www.youtube.com](http://www.youtube.com)

4. www.google.com

**4.1.5. Overview**

In this chapter, we will describe about the system design part. In the system, design includes the subsystem decomposition, design goal, hardware/software mapping, persistent data management and the diagrams.

**4.3.7. Boundary Conditions**

As its name indicates we do in this portion is how the system work or function, which means from initiation to finalization of the system including the failure.

When a bidder or user needs to use OBSA. First search the website by using any devices that have internet access, and then he /she will see the advertisement page. If he/she is interested, will continue by registering (signup).Then they will pay to the casher personally, after that the casher gives the slip to the bidder. By using the slip, they login into the system and get the bid document. After reading the document, after cross checking the files the bidder fill the form and submit to the system. Finally, the system compares the prices that submitted by the bidders based on the price and announce the winner with less price online in addition; the winner will receive a message.

**Failure**

Systems can fail in many ways in our project, maybe there is system user interface (UI) error, internet not working and some fatal errors.

|  |  |  |
| --- | --- | --- |
| Error | Cause | Forecast Solution |
| System User Interface not working | Could be many internal causes | Restarting the device wiping the system UI cache |
| Some fatal errors | Malicious software | Scan with anti-virus |
| Internet not working | No internet from ISP | He/she should contact his/her ISP |
| Server not found | Internet connection fail | Make sure network connection, proxy or firewall protection setting are correct |

**4.3.6. Deployment diagram**



Figure 1 Deployment diagram