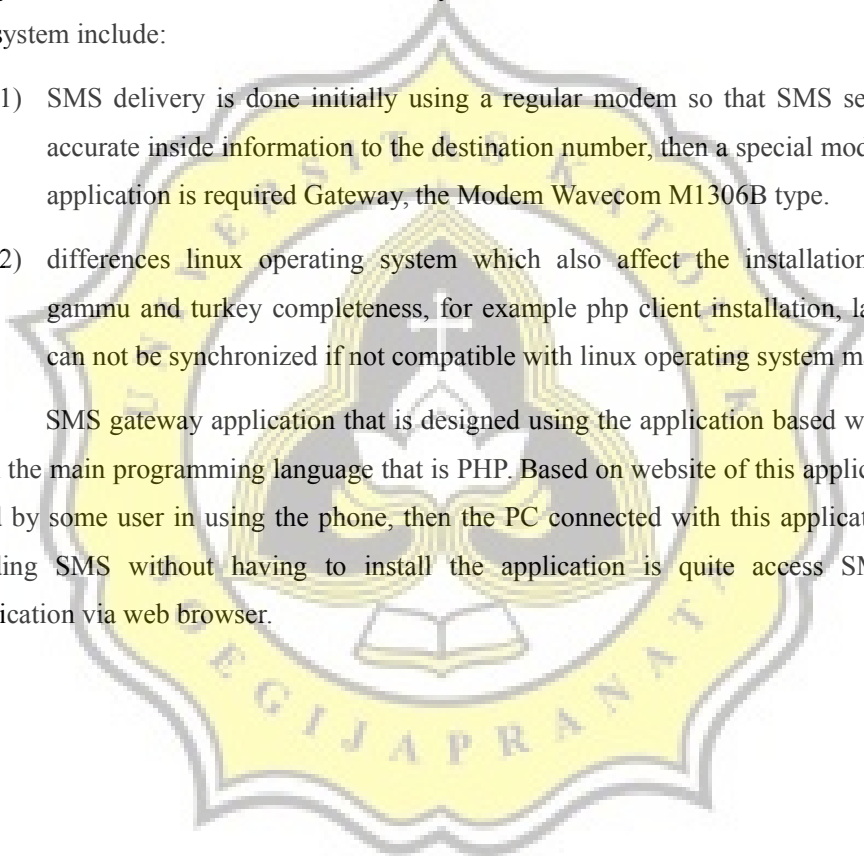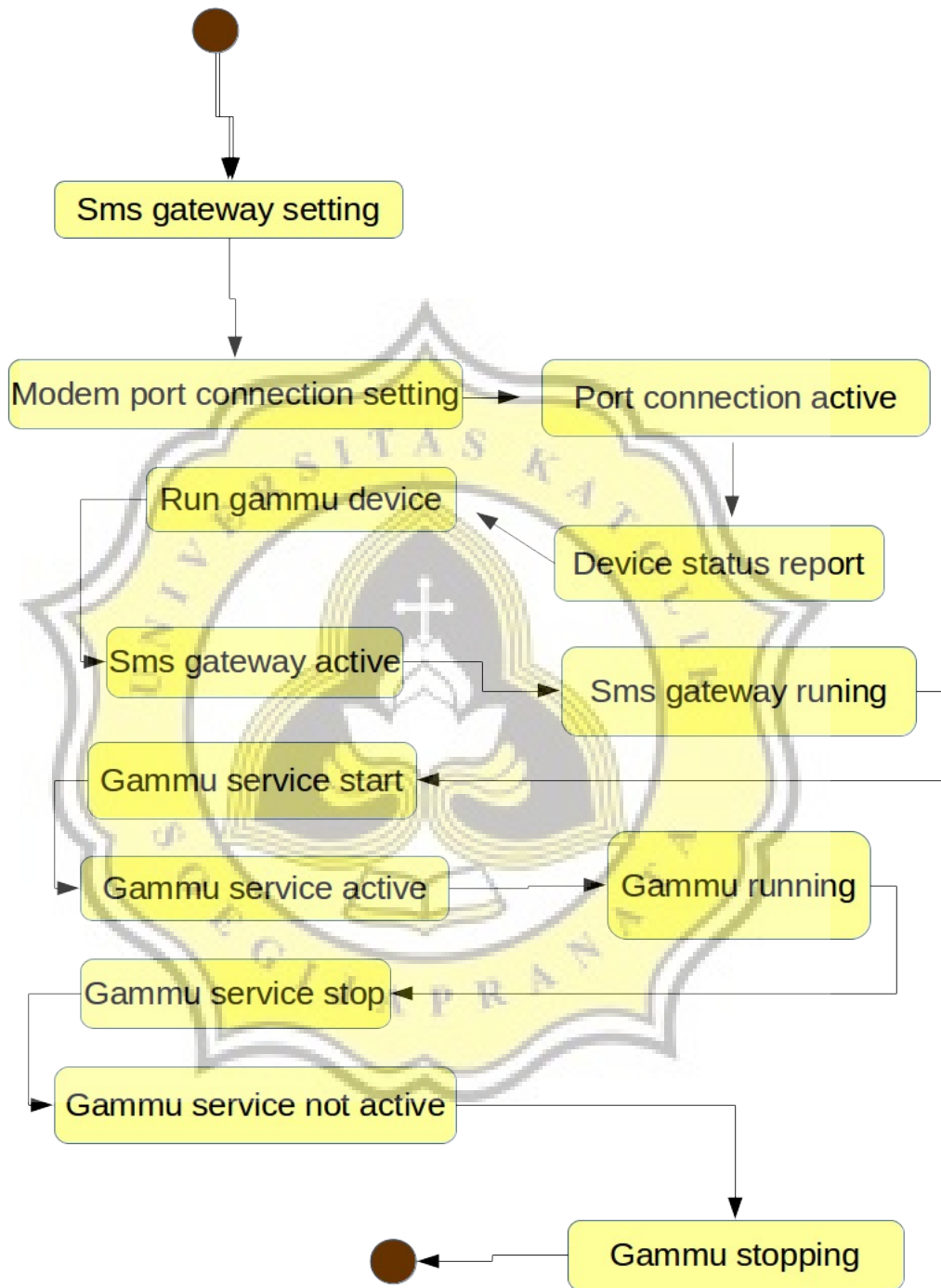# CHAPTER 4
ANALYSIS AND DESIGN

4.1 Analysis

At the stage of analysis of a system performed before the stage designing done. With the purpose of applying the analysis of a system is to know the reason why the system is needed, formulate the need of the system and to identify and evaluate all kinds of problems and obstacles what can happen, so be reference to proposed improvements.

After the authors make observations and research activities that associated with the object of research, that the author sees from various angles view of the ongoing system analysis that there are deficiencies of the system deficiencies that need to be evaluated from the system include:

1) SMS delivery is done initially using a regular modem so that SMS sending is not accurate inside information to the destination number, then a special modem for SMS application is required Gateway, the Modem Wavecom M1306B type.

2) differences linux operating system which also affect the installation process of gammu and turkey completeness, for example php client installation, lampp xampp can not be synchronized if not compatible with linux operating system matching

SMS gateway application that is designed using the application based website that is with the main programming language that is PHP. Based on website of this application can be used by some user in using the phone, then the PC connected with this application can also sending SMS without having to install the application is quite access SMS gateway application via web browser.

Sms gateway setting

Modem port connection setting → Port connection active

Run gammu device

Device status report

Sms gateway active

Sms gateway runing

Gammu service start

Gammu service active → Gammu running

Gammu service stop

Gammu service not active

Gammu stopping

operator	system
1. Sms gateway device setting	
2. Port connection setting	
	3. Port connection active and success
	4. Gammu device status report
	5. Gammu device run
	6. Sms gateway active
7. Sms gateway running	
8. Start sms gateway	
	9. Sms gateway active
	10. Gammu running
11. Stop gammu service	
	12. Gammu service unactive
	13. Gammu stopping

Table 4.1.1: use case sms center

4.2 Design

On Deployment Diagram assume software mapping on hardware which are mutually integrated, on the Deployent This diagram illustrates the details how components are deployed in the system infrastructure. And how the networking capabilities of the system, Server specifications and other things are physical. Here's the Deployment Diagram on SMS Gateway Application Design: