# 2. Overall Description

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## 2.1Product Perspective

* This System will provide features which will addresses the primary goal of this project is to identify action initiatives that make up the Communicable Disease and Analytical System for the Epidemiology department in Sri Lanka which they still don’t have.
* Epidemiology is the study of patterns of health and illness and associated factors at the population level. It is the method of public health research, and helps inform evidence-based medicine for identifying risk factors for disease and determining optimal treatment approaches to clinical practice and for preventative medicine.
* National Epidemiological web site is composed only with data sheets and presentations of some communicable disease. For more data approach researchers has to go the National Epidemiological unit for data gathering. Those data has to be customized separately to be used in statistical analysis of disease prevalence.
* As this process takes more time and cost professionals loose interest in carrying out researches in disease prevalence which is the main aspect of calculating disease burden and also applying preventive methods. Our analytical system order to foster a responsive climate where providing all about the communicable diseases statics and the provide information to guide interventions for the users who use the system for their educational purposes or research purposes. To that end, Communicable Disease and Analytical System have more functions to do this major task.

2.1.1 System interfaces

The System requires a Windows XP operating system. Windows XP operating system provides an API to execute user application.

2.1.2 User interfaces

The system will be developed with a Graphical User Interface to user for interact with the application. The Graphical User Interface provides text boxes, Buttons, and other widgets for user interaction.

2.1.3 Hardware interfaces

Computer with high memory capacity and high processing power.

2.1.4 Software interfaces

**Database:** Microsoft SQL Server 2008.

**Application:** ASP (Active Server Pages)

**Web Server:** IIS (Internet Information Services (IIS) is a powerful

Web server that provides a highly reliable, manageable, and scalable

Web application infrastructure)

2.1.5 Communication interfaces

The Customer must connect to the Internet to access the Website:

* Dialup Modem of 52 kbps
* Broadband Internet
* Dialup or Broadband Connection with an Internet Provider.

2.1.6 Memory constraints

The Communicable Disease and Analytical System, application is expected to use more than 4MB of RAM and 12MB of storage space.

2.1.7 Operations

The system requires special data feeding. User should arrange daily data according to a given excel sheet and should use functions given in that excel sheet to upload data.

Integration with GIS database is unattended process this runs every night at 11.00 pm. Purpose is to synchronize data in main database with GIS database.

SMS generation is unattended process this runs every night at 11.00 pm. Purpose is to generate and send SMS to clients in endangered areas.

2.1.8 Site adaptation requirements

**2.2 Product functions**

**2.2.1 Use Case Diagram**

**2.3 User characteristics**

The Communicable Disease and Analytical System can be easily handled by users who have a basic knowledge of system. A basic knowledge of Windows XP operating system will be an advantage for the user to install the application. Basic about personal computers and internet accessibility will help the user to update the application**.**

**2.4 Constraints**

**2.5 Assumptions and dependencies**

* We are going to useASP.NET to develop our system & use Apache Tomcat as Web application server.
* Therefore the system features will depend above those two things. Although this is not a part of a large project this can has dependencies with any other systems. Example: Future versions of Communicable Disease and Analytical System shall operate on PCs running Windows 7.

**2.6 Apportioning of requirements**

The basic requirements of the application going to fulfilled during first implementation of the project. Then in the next release of the application will fulfill the other requirements of the application