**STRUCTURED SYSTEM ANALYSIS AND DESIGN**

GROUP ASSIGNMENT

COMPUTER SCIENCE

SECTION-2

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**Ethiopian Airlines as a System –** it has been ranked among one of the top airlines in our continent also globally, has received a lot of awards. We can take this airline as a system by breaking down it’s components and function into the nine characteristics that describe a system.

The airlines as a system can be described by the nine characteristics listed below: -

* **Components:**

\* Airplanes – for transporting passengers and cargos.

\* Buildings – where the passengers check in get different services.

\* Vehicles – for different movement within the system.

\* Employees – the important part of the system that facilitate and perform tasks.

* **Interrelated Components:**

\* Airplanes-Captains – without the captains we can not think about airplanes because

they operate them

* **Boundary:**

**\*** Addis Ababa around Bole area (main airport) – its boundary is within this area it can’t operate outside of its boundary

* **Purpose:**

\* To transport people and different cargos from one place to another.

* **Environment:** Hotels, Restaurants, Cafes, Lounges around Bole area
* **Interface:** there multiple paths to reach this system some of them are listed below

\* Ring Road, Airport Road, Ethio-China street, Meskel Square, Bole Homes Road…. etc

* **Inputs:**

\* Passengers – transport them from one place to another

\* Cargos – carry cargos from one part of the world to its destination

\* Number of planes

* **Outputs:**

\* Revenue – as it gives service to customers it generates revenue as an output.

\* Passenger-miles – a mile traveled by a passenger with this system.

\* Number of passengers – the passengers the system transported

\* Number of departures – the amount of flight that the system completed

* **Constraints:**

\* Risky in case of accident – in worst case scenarios passengers may die, also cargos may

destruct.

\* High cost – to travel with this system it has higher cost when compared to other

systems

\* Enormous investments – it requires a high amount of capital to start working with this

system.