Group 8: Yang Ming, Trung Hieu Tran, Kyumin Lee

1, Identify and give examples of the parts of the system using the general systems theory

**System Example:** Employee Access Management System

**Environment**: Operates in BigBanG, does not work in other countries.

Employee Access Management System consists of manager, computers, access gates, cameras, ID cards, employees, and their record

**Input**: All employee’s information, admins, and government military officers

**Output**: Well managed personnel, lower risk of danger

**Feedforward**: Any invalid information gets banned, discarded

**Feedback**: Records get updated, if tracker goes into unauthorized area, give warning on system dashboard.

**Control**: System compares ID card with database. If records match then door open, else door shut. If military officers don’t have ID card, manually check their background, and give a temporary access card.

Includes fingerprint scanner, camera, face scanner, as backup methods.

Includes chip tracking on ID card, turns on when granted access, paired with security cameras on the premises. Footage is recorded.

2, Classify this system.

Classification:

* Management support system
* Real-time control (door closes in real time + give warning)

3, Identify Stakeholders, Consequence of system and nature of effect on stakeholder

Stakeholders: The entire company (employees and managers, owners) and the country’s military, government officers, and their families, other branches of the country, adjacent businesses

Consequence:

* Less privacy
* Less flexibility during emergencies
* Expensive to make more secure (against cyberattacks)

4, What might be the cost of failure of the system

Low security, high risk of intruders, harder management on employees => higher risk of information leakage, lose valuable data, materials, stakeholders might lose lives