LKS SMK
Tingkat Nasional
Tahun 2014

Soal

BIDANG LOMBA

IT-Software Application

Phase 1: Designing Information System including the Database

A good information system always comes from a good system design, in this development phase you are required to design the information system including the database to support the ESEMKA Airlines business process above using several UML tools required:

1. **Activity / Flow Chart Diagram**

    a. Ensure all key activity in ESEMKA Airlines business process is illustrated detailed inside the diagram

    b. Ensure all the actors related on the business process is illustrated inside the diagram

    c. Ensure all the component used to illustrate the diagram is using the appropriate component

2. **Entity Relationship Diagram**

    a. Ensure the ERD developed can store all the information required in the system

    b. Ensure the relationship between the entities in the diagram is connected properly.

    c. Identify all the primary key and the foreign key

    d. Ensure all the component used to illustrate the diagram is using the appropriate component

3. **Physical Model of the Database**

   a. Ensure all the entity in ERD is translated into a database object

   b. Ensure all the relation between the translated database object is connected properly

   c. Ensure all the constraint is implemented to support the system

   d. Develop minimum 5 data sample for every entity designed to give a clear example of data stored in the database