

1. From the following requirement, design conceptual diagram using EER or UML based on the given incomplete design next page <8pts>

- The database for this question is for airline flight information.
- Each FLIGHT is identified by a Flight\_number, and consists of one or more FLIGHT\_LEGs with Leg\_numbers 1, 2, 3, and so on. For example, a flight from Chiang Mai to Seattle composes of 4 legs, i.e. Chiang Mai-Bangkok, Bangkok-Seoul, Seoul-Los Angelis, and Los Angelis-Seattle.
- Each FLIGHT\_LEG has scheduled arrival and departure times, airports, and one or more LEG\_INSTANCES—one for each Date on which the flight travels. From the previous example, Chiang Mai-Bangkok could be on any date if available.
- FAREs are kept for each FLIGHT.
- For each FLIGHT\_LEG instance, SEAT\_RESERVATIONS are kept, as are the AIRPLANE used on the leg and the actual arrival and departure times and airports.
- An AIRPLANE is identified by an Airplane\_id and is of a particular AIRPLANE\_TYPE.
- CAN\_LAND relates AIRPLANE\_TYPES to the AIRPORTs at which they can land. An AIRPORT is identified by an Airport\_code.

Note that required assumptions must be written, and PK, PK-FK, minimum, maximum participation constraints must be written.

