# ACTIVITY DIAGRAM

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# WHAT IS ACTIVITY DIAGRAM?

- Describe the flow of control of the target system, such as the exploring complex business rules and operations, describing the use case also the business process.

- A typical business process which synchronizes several external incoming events can be represented by activity diagrams.

- They are most useful for understanding work flow analysis of synchronous behaviors across a process.
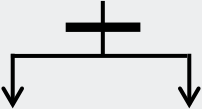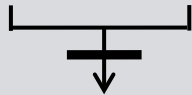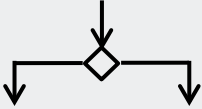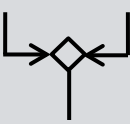
# WHY ACTIVITY DIAGRAM?

- Activity is a particular operation of the system. Activity diagrams are not only used for visualizing dynamic nature of a system but they are also used to construct the executable system by using forward and reverse engineering techniques.

- High level understanding of the system's functionalities.

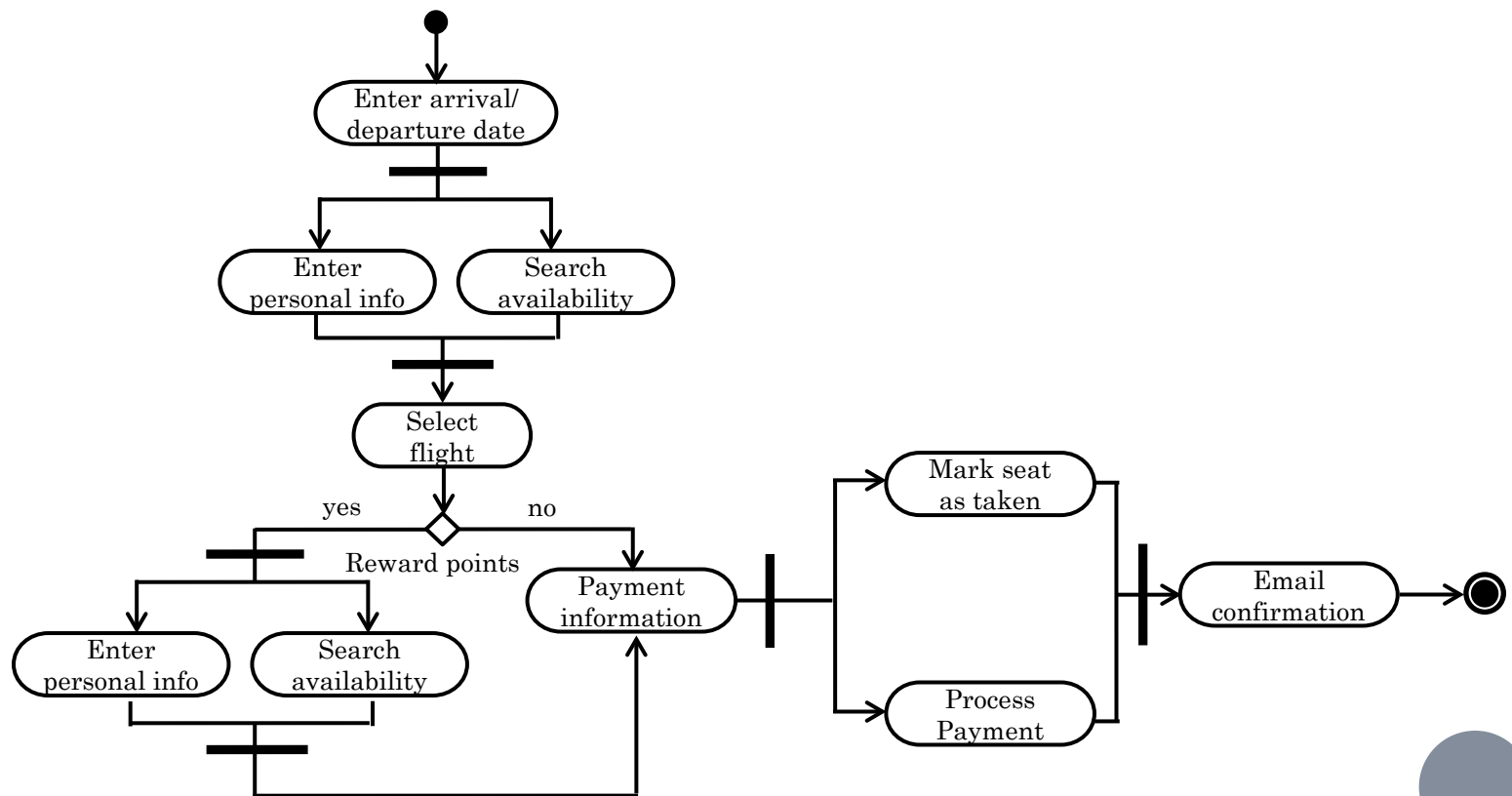- Investigate business requirements at a later stage.

# ACTIVITY DIAGRAM

| Symbol | Name | Description |
|:---:|---|---|
| ● | Start state | Used for starting the initial activity |
| ◉ | End state | Termination of the activities |
| ⬭ | Activity | Used to represent different activities in the system |
| Fork symbol | Fork | A fork is used when multiple activities are occurring at the same time. |
| Join symbol | Join | Used for combining multiple concurrent activities |
| Branch symbol | Branch | Describes what activities will take place based on a set of conditions. |
| Merge symbol | Merge | All branches at some point are followed by a merge to indicate the end of the conditional behavior started by that branch |

# EXAMPLE: ACTIVITY DIAGRAM
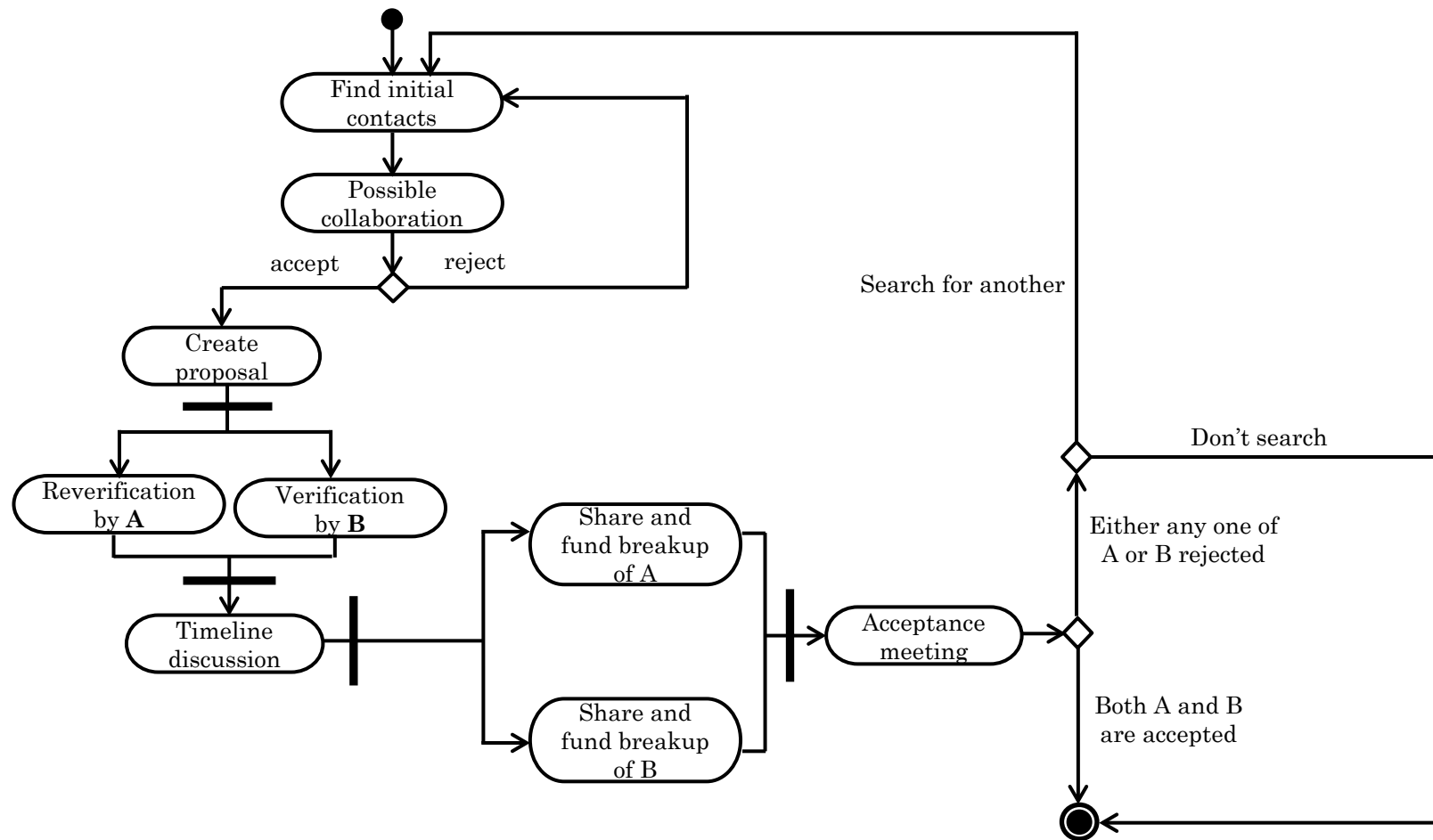
o Air Ticket Booking System

# ASSIGNMENT: BUSINESS PROPOSAL

- Let there is a company A, which wants to float a business proposal with company B.
- Draw the activity diagram
- Remember
  - The proposal of company A may be rejected by any company B at initial phase, if company B thinks the collaboration is not possible
  - Final decision should be taken after a final acceptance meeting that whether the collaboration is possible at all or not

# SOLUTION: BUSINESS PROPOSAL

# THANK YOU