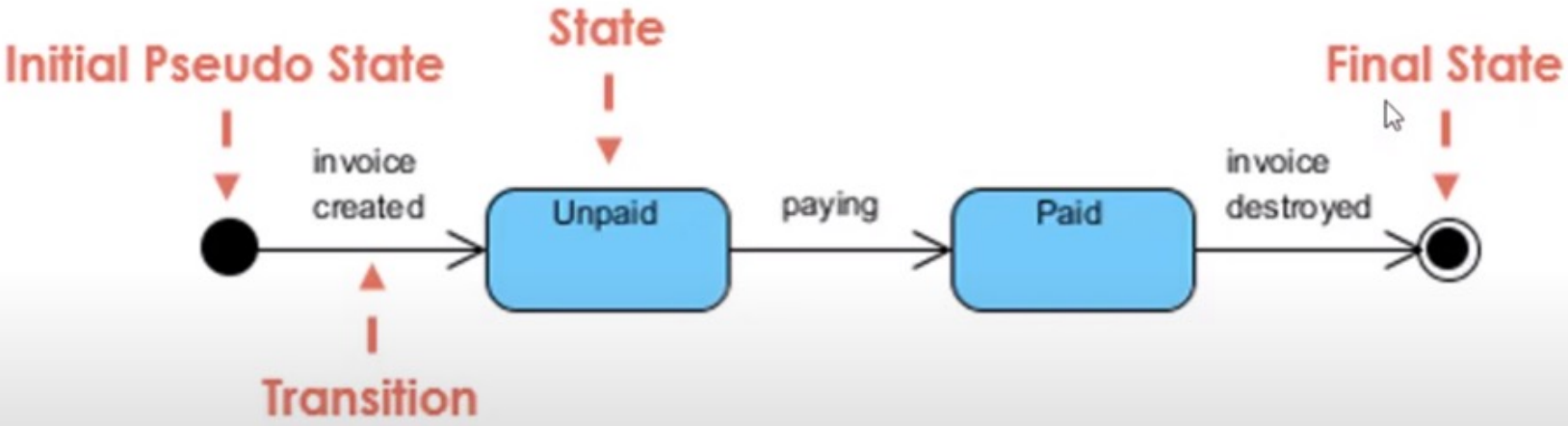
State Diagram

- State Diagram, State Machine Diagram and state chart or State machine all these are different names of the state diagram.
- State is a situation in the life of an object.
- This diagram shows how an object respond to various events by changing its state.
- This UML Diagram is used to model the Dynamic Behavior off the system.

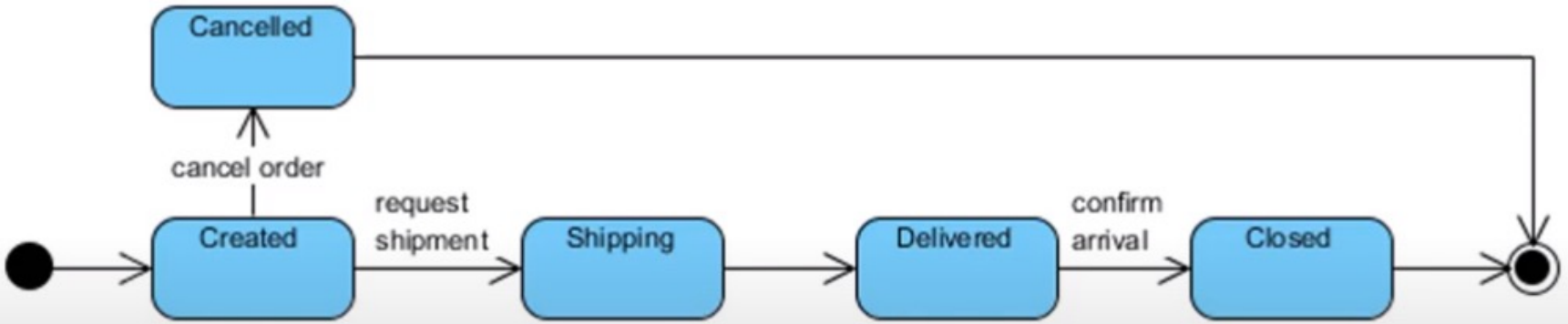

Initial Pseudo State
State
Final State
invoice
created
Unpaid
paying
Paid
invoice
destroyed
Transition

EasyPaisa Example

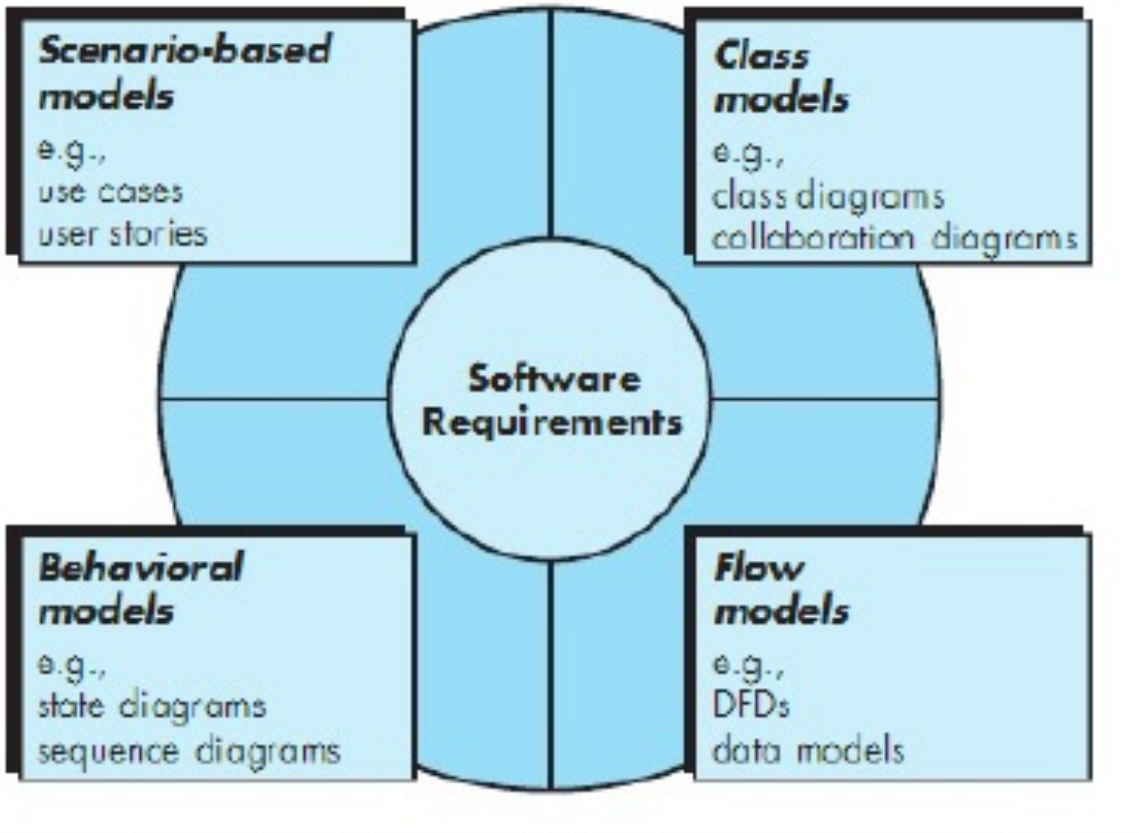
- Suppose you access the withdraw object of your easypaisa account.
- You have 10,000 in the easypaisa account.
- On 1st Withdraw object access you withdraw 5000
- On 2nd Withdraw object access you with draw 4000
- The object is behaving in same manners in 1st and 2nd action.
- On 3rd Withdraw object access you withdraw 3000 will it act the same way as it behave in the 1st and 2nd access?
- No, Even the access way is same, but the object reaction will be different.

Order Delivery State Diagram

This is just a real-life example to make your concept clear how an object change its state.

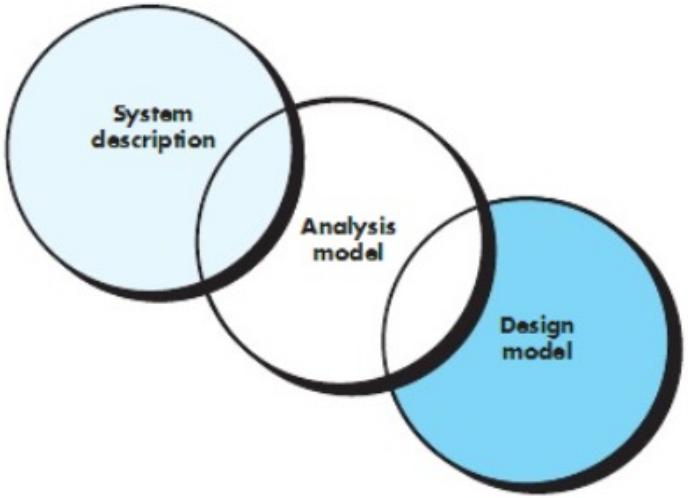


Elements in Analysis Model



Analysis

- Focus on requirements
- Each element should improve understanding of requirements
- Delay consideration of infrastructure till design
- Requirements model provides value to all stakeholders
- Keep the models simple



Prioritizing Requirements

- Different stakeholders have different set of requirements
  - potential conflicting ideas
- Need to prioritize requirements to resolve conflicts
- Prioritization might separate requirements into three categories
  - *essential*: absolutely must be met
  - *desirable*: highly desirable but not necessary
  - *optional*: possible but could be eliminated

References

- Pfleeger Book slides from UCF

Acknowledgement!

- A few slides have been reused from UCF slides for the SE course