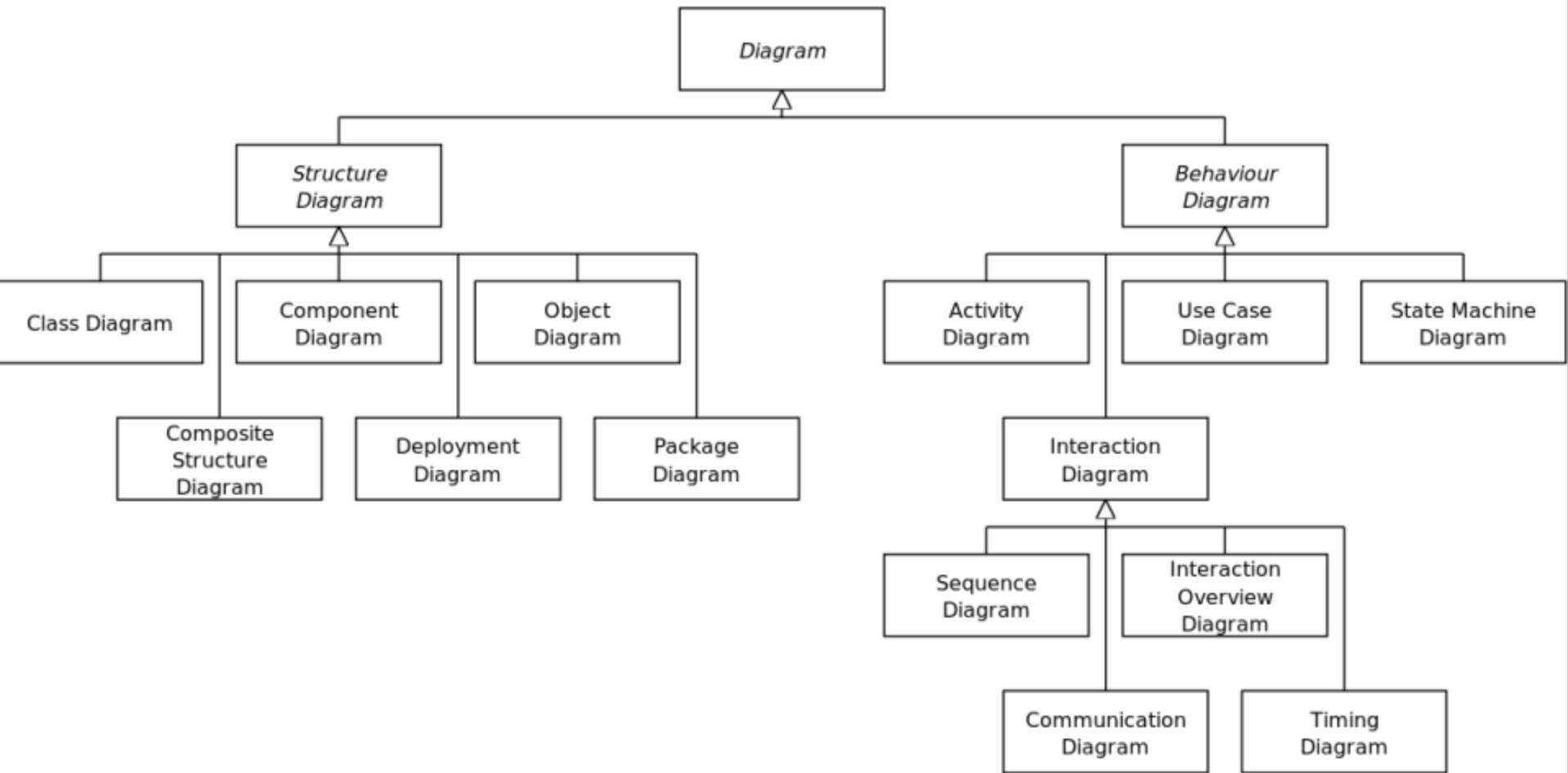


UML > DIAGRAMAS DE ATIVIDADES

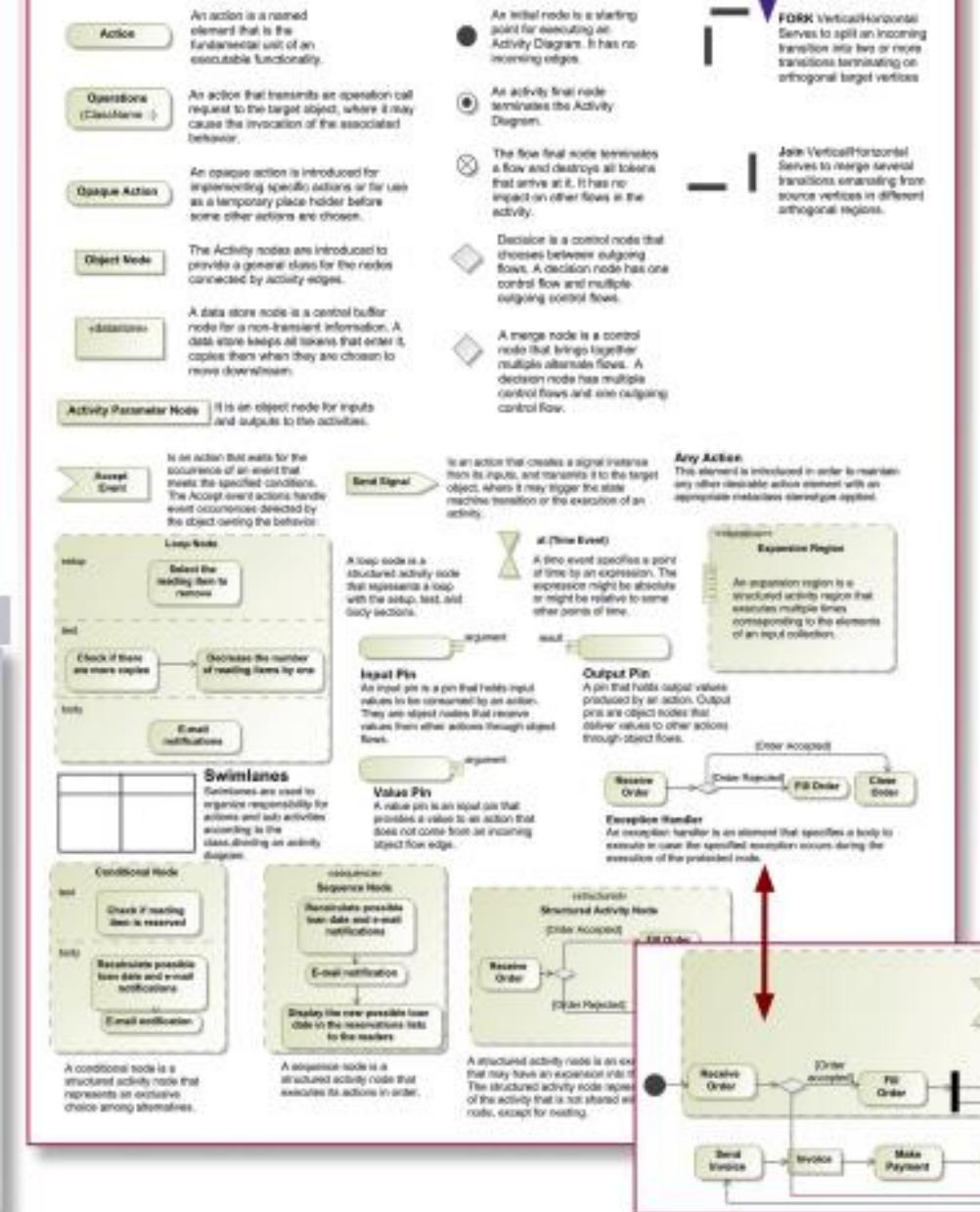
MODELAÇÃO E ANÁLISE DE SISTEMAS

ILÍDIO OLIVEIRA ico@ua.pt
v2018-02-22

Diagramas da UML 2.x

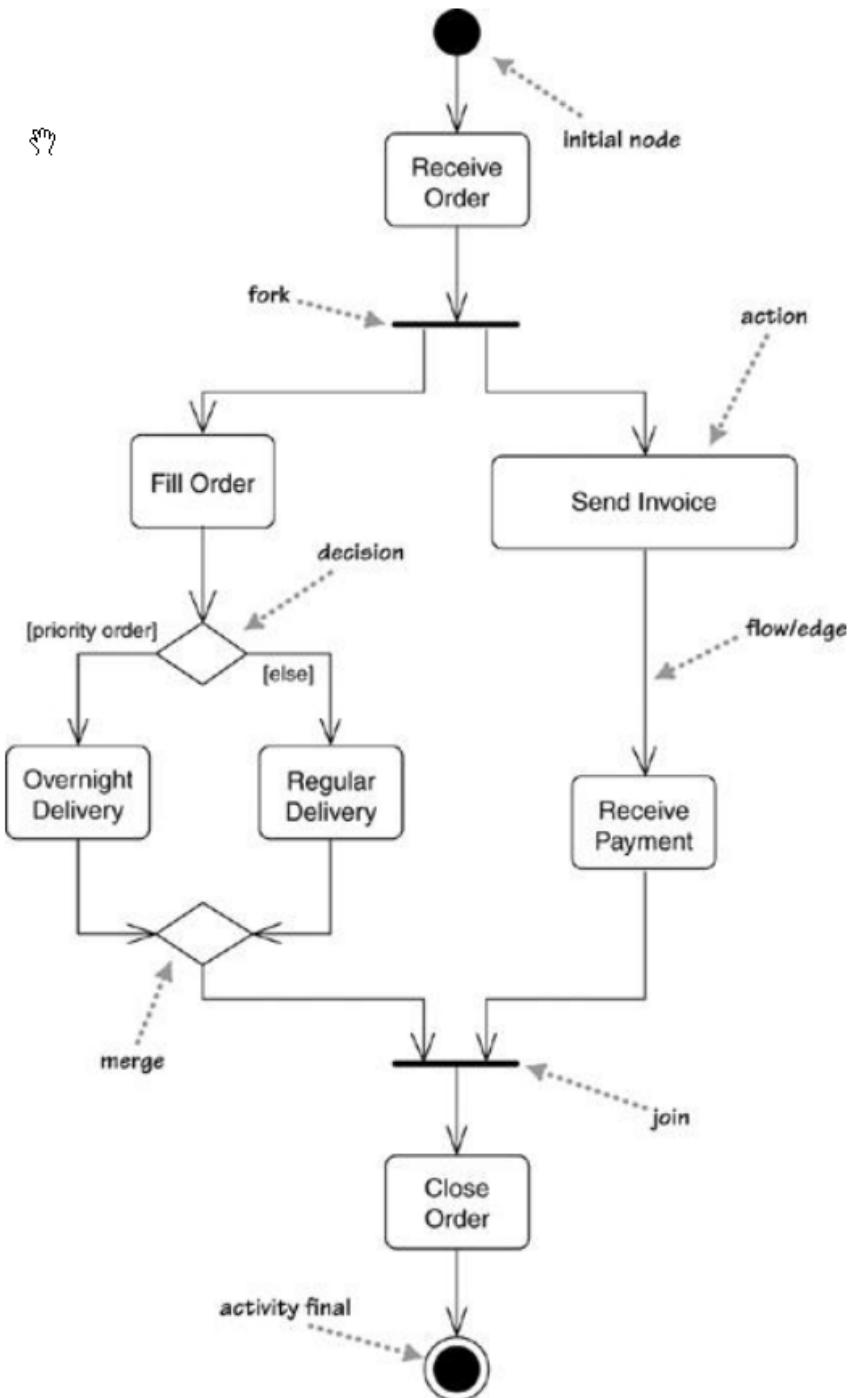


ACTIVITY DIAGRAM:



NoMagic's UML
Reference card

Elementos do diagrama de atividades



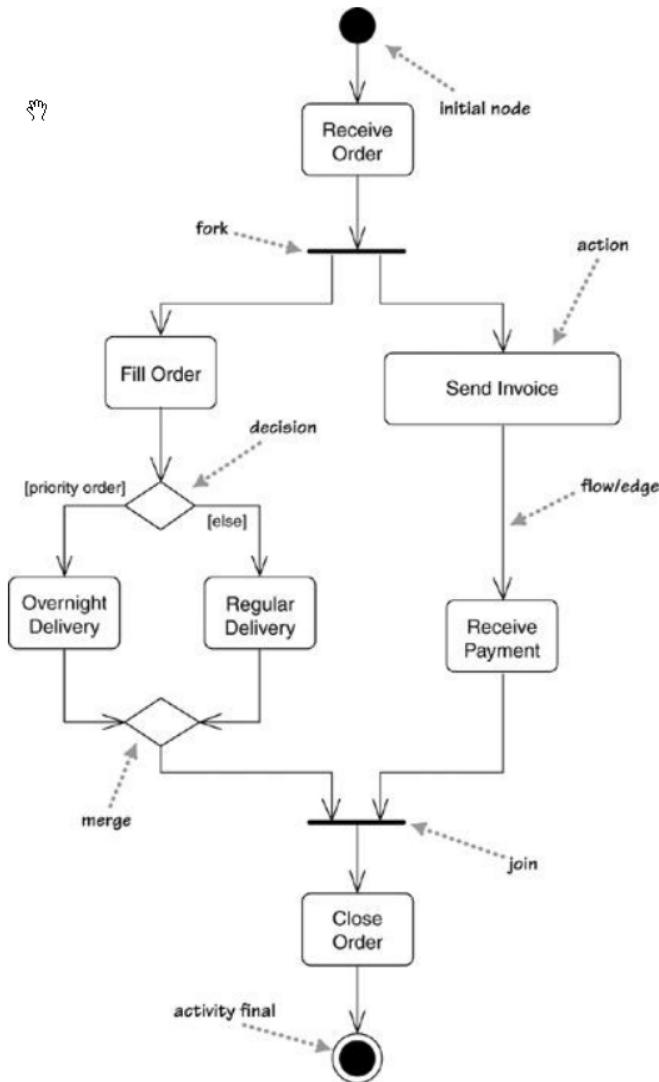
Os diagramas de atividade mostram o fluxo de ações (e de dados)

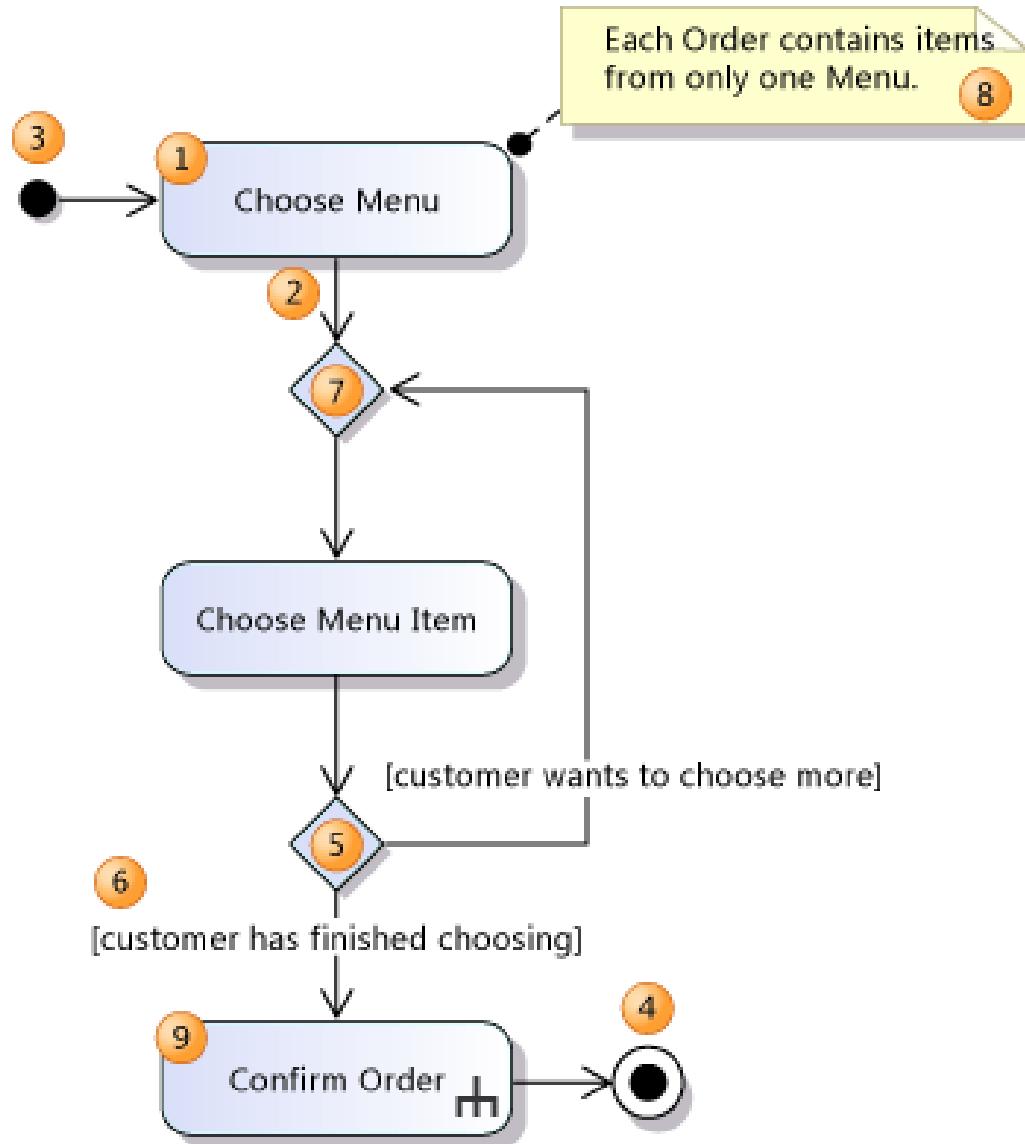
Quando aplicar?

- Modelar fluxos de trabalho/processos de negócio
- Descrever um algoritmo complexo
- Descrever a sequência de interações entre atores e o sistema sob especificação, num caso de utilização

Pode ser usado para descrever os processos organizacionais existentes / novos

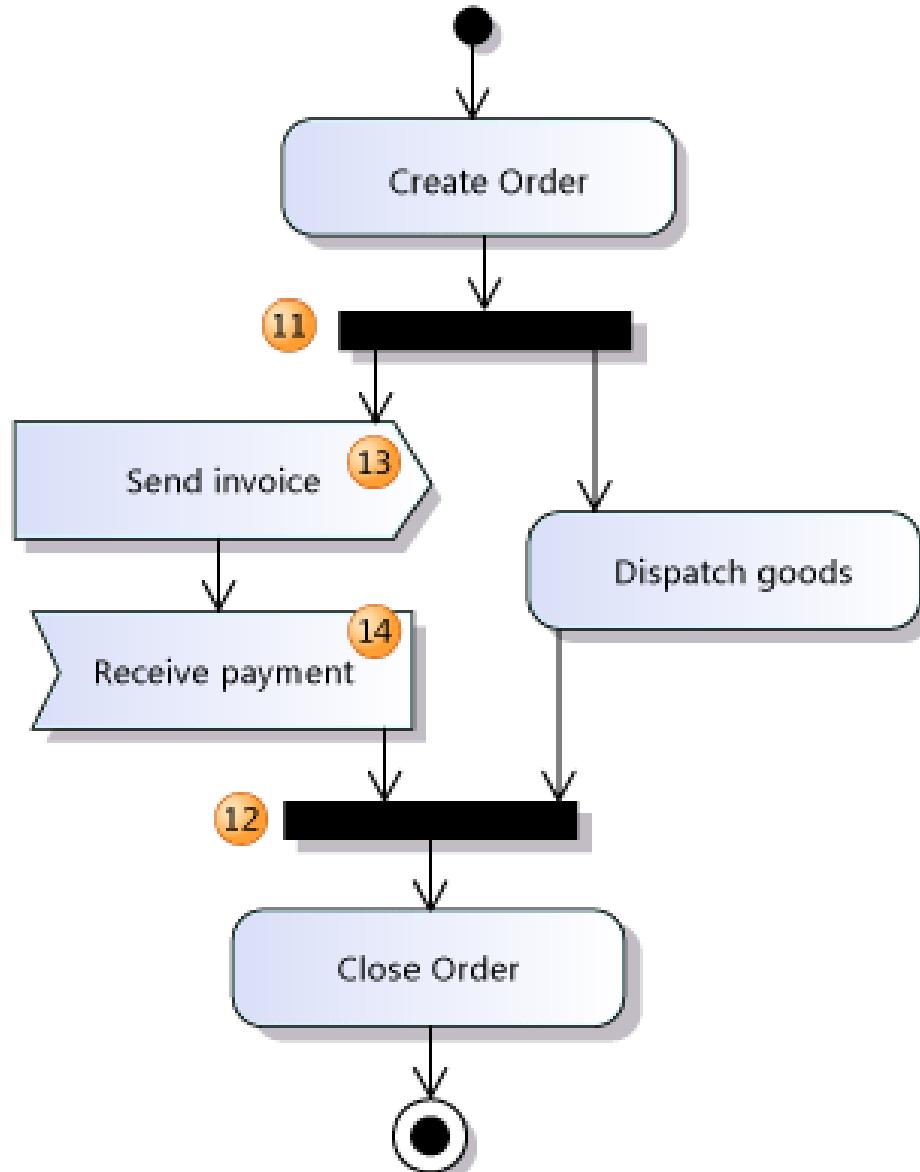
- Neutro em relação à programação
- Bom a captar papéis desempenhados
- Pode captar o fluxo de dados também

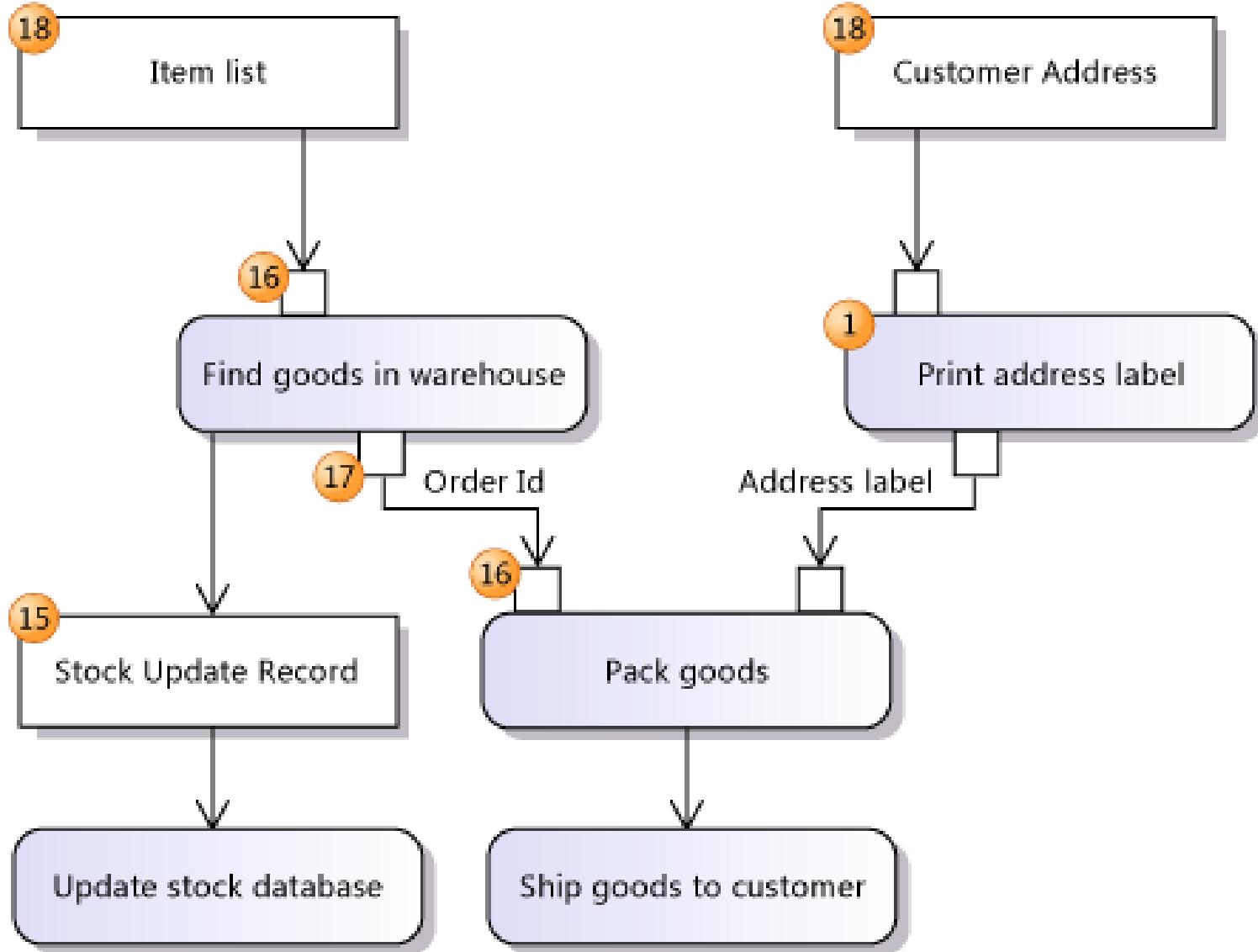




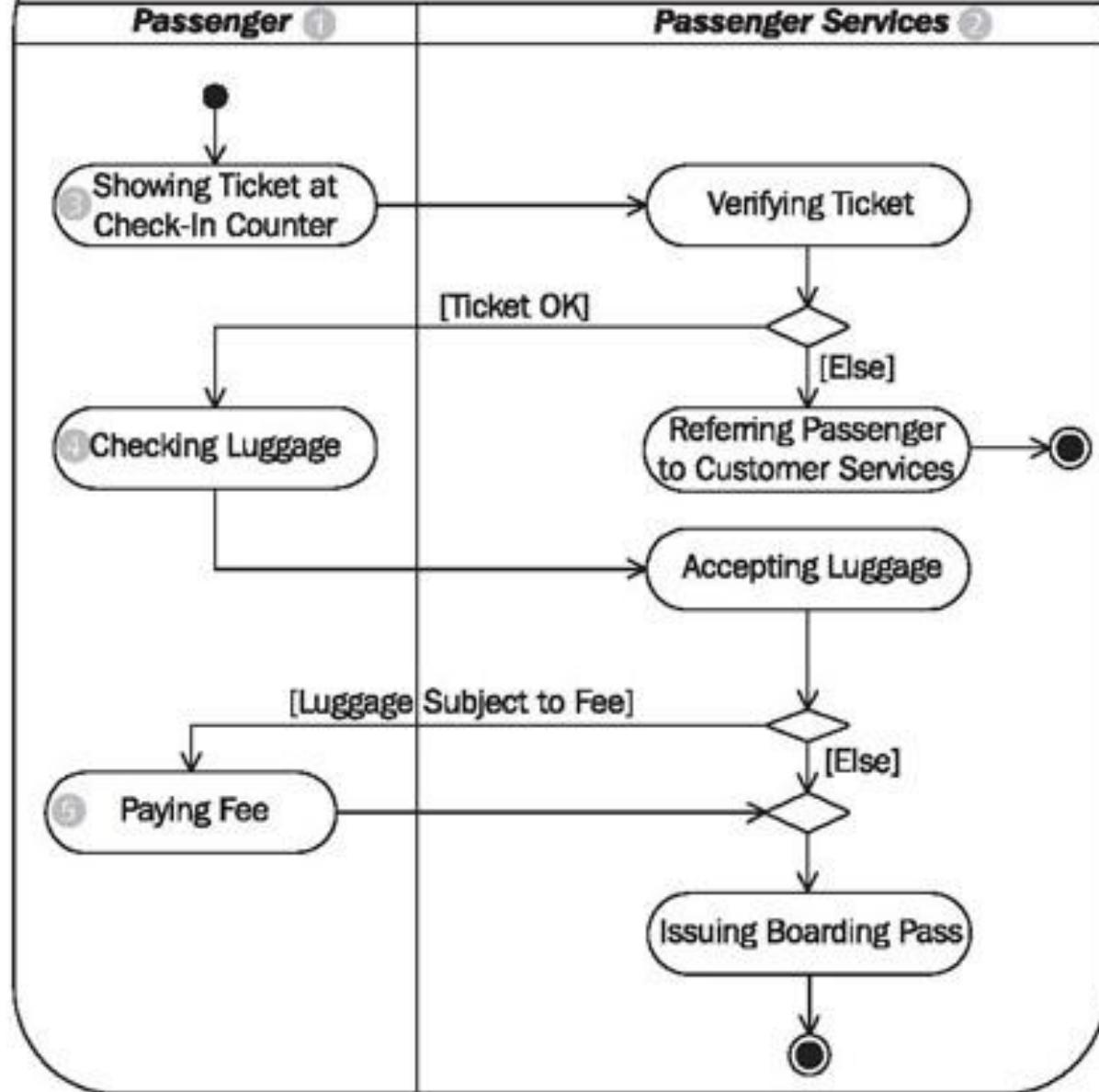
Each Order contains items
from only one Menu.

8





Passenger checks in



Diagramas para representar workflow

Diagram	Description	Advantages	Disadvantages
System flowchart	Earliest form for depicting sequencing of activities.	<ul style="list-style-type: none">■ Intuitive. Each type of input and output is clearly marked with its own symbol.■ Includes logic symbols.	<ul style="list-style-type: none">■ Not compliant with UML.■ Can be hard to learn (many symbols).
Activity diagram	UML tool for describing logic. Used to describe entire system, a use case, or an activity within a use case. Has two versions: <ul style="list-style-type: none">■ Activity diagram without partitions (swimlanes): Does not show who does what.■ Activity diagram with partitions: shows who does what.	<ul style="list-style-type: none">■ Part of UML standard.■ Can handle many situations in one diagram.■ Simple diagramming conventions.■ Encourages thinking about opportunities for parallel activities (more than one activity going on at the same time).	<ul style="list-style-type: none">■ Ability to handle many situations can lead to a diagram that is too complex to follow.
Business process diagram (BPD)	Business process modeling notation (BPMN) tool for describing workflow	<ul style="list-style-type: none">■ Part of BMN standard, managed by the OMG■ Rich symbol set can model complex and subtle workflow requirements better than activity diagrams.	<ul style="list-style-type: none">■ Not UML-compliant■ Difficult to understand without prior training

Referências de consulta rápida: UML

MSDN, "[Developing models for software design](#)"

<http://www.uml-diagrams.org/>

M. Fowler, "UML Distilled" (3rd ed)

NoMagic's [UML Reference card](#)