Software Engineering Essentials

UML Component Diagram

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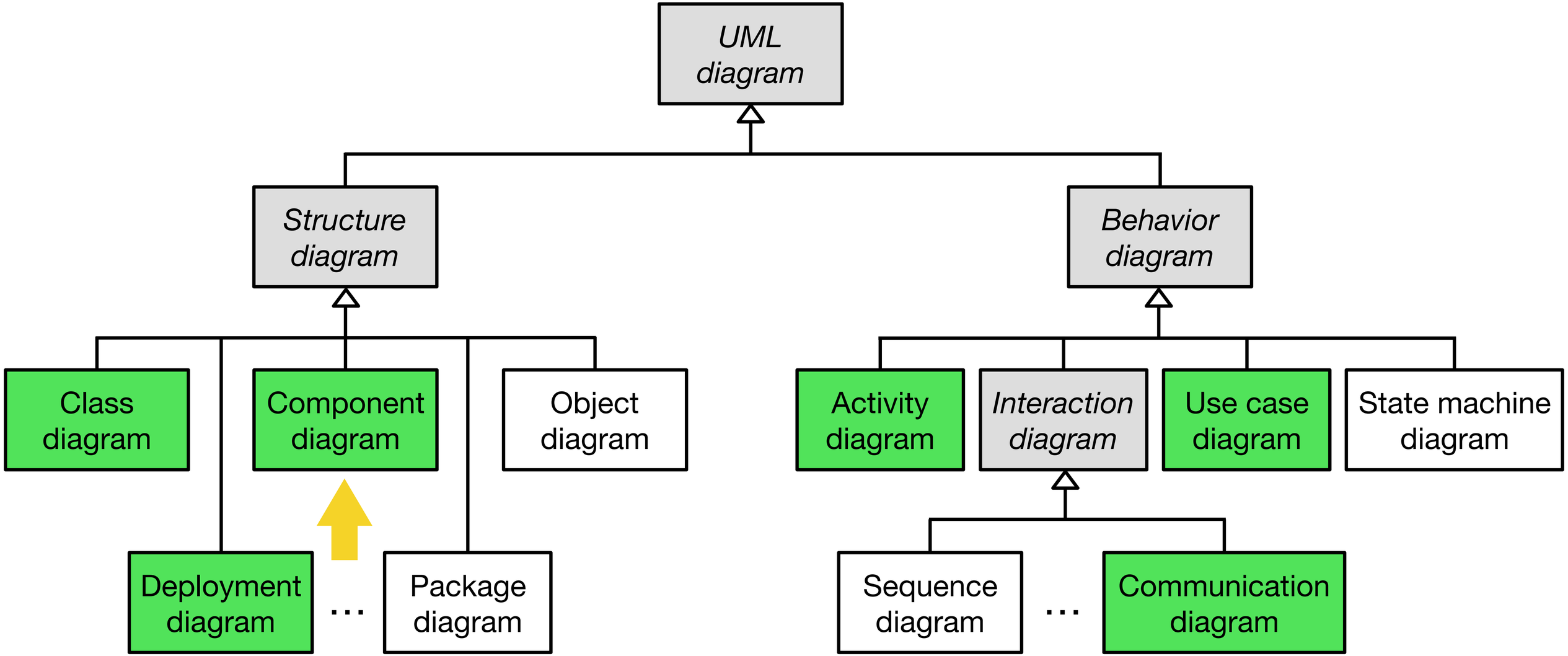
UML diagrams covered in this course

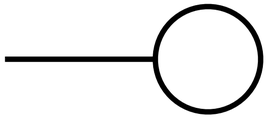
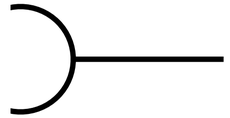


Purpose of Component Diagrams

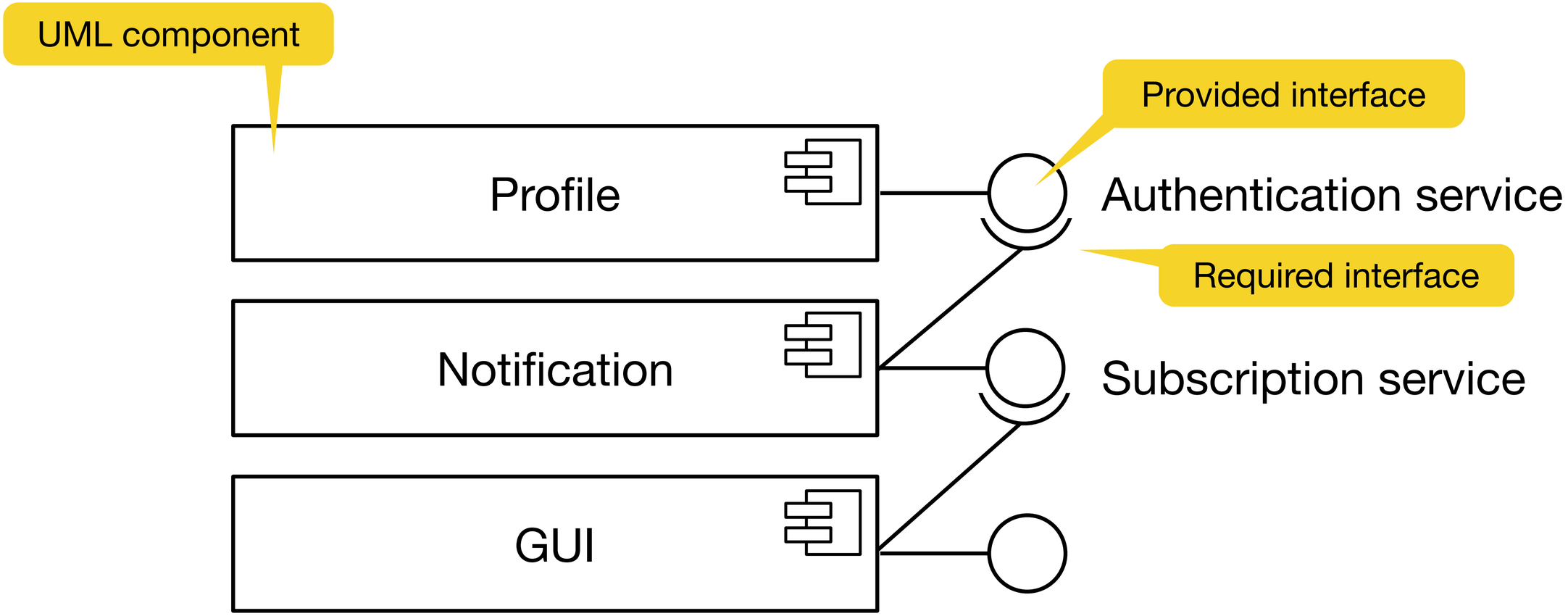
- Model the top-level view of the system design in terms of components and dependencies among these components

- Dependencies are connectors from the client component to the supplier component
- Component diagrams are informally also called “software wiring diagrams” because they show how the components are wired together in the application

UML Interfaces: Lollipops and Sockets

- An interface describes a group of operations provided or required by a component
  - A provided interface is modeled using the lollipop notation 
  - A required interface is modeled using the socket notation 
- A port specifies a distinct interaction point between the component and its environment
  - Ports are depicted as small squares on the sides of the classifiers 

Example of a Component Diagram



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