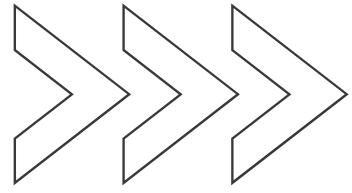# COMPONENT-BASED SOFTWARE ENGINEERING
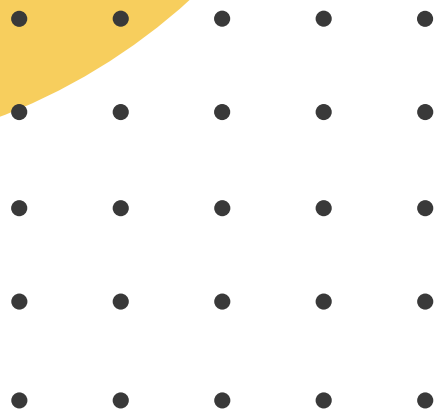
Software Engineering - CS 346

ADVANCED TOPIC PRESENTATION

ID No:

19DCS098 - Parth Patel

19DCS107 - Savan Pedhadiya

19DCS151- Irfan Ukani

19DCS152 - Poojan Vadaliya

19DCS158 - Sakshi Zalavadiya

CHARUSAT
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPSTAR

Component Based Software Engineering

Component-based software engineering (CBSE) is a process that emphasizes the design and construction of computer-based systems using reusable software "components."

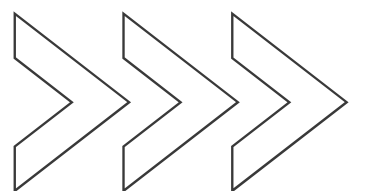# ACTIVITIES

COMPONENT QUALIFICATION:

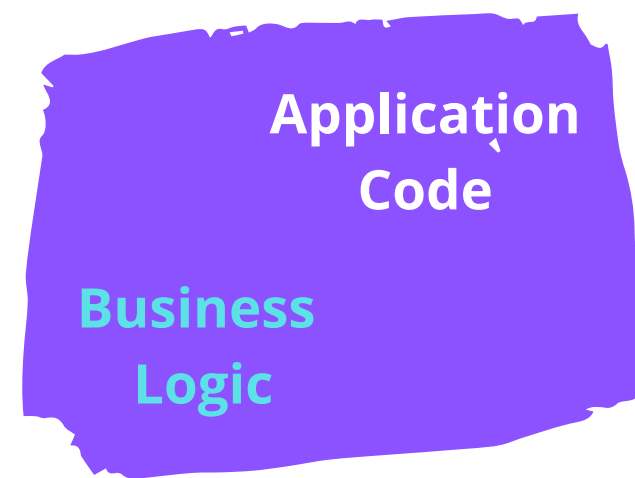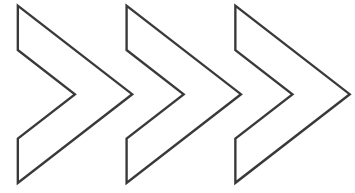A protocol designed to demonstrate that a component material meets its specification.

Product functionality test

User Requirement Tests
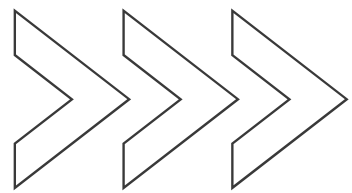
Packaging qualification test

Shipping/Handling requirement tests

Component Adaptation

Business Logic

Application Code

Application Code

Business Logic

This activity ensures that the architecture defines the design conditions for all component and identifying their modes of connection. In some of the cases, existing reusable components may not be allowed to get used due to the architecture's design rules and conditions. These components should adapt and meet the requirements of the architecture or refused and replaced by other, more suitable components.
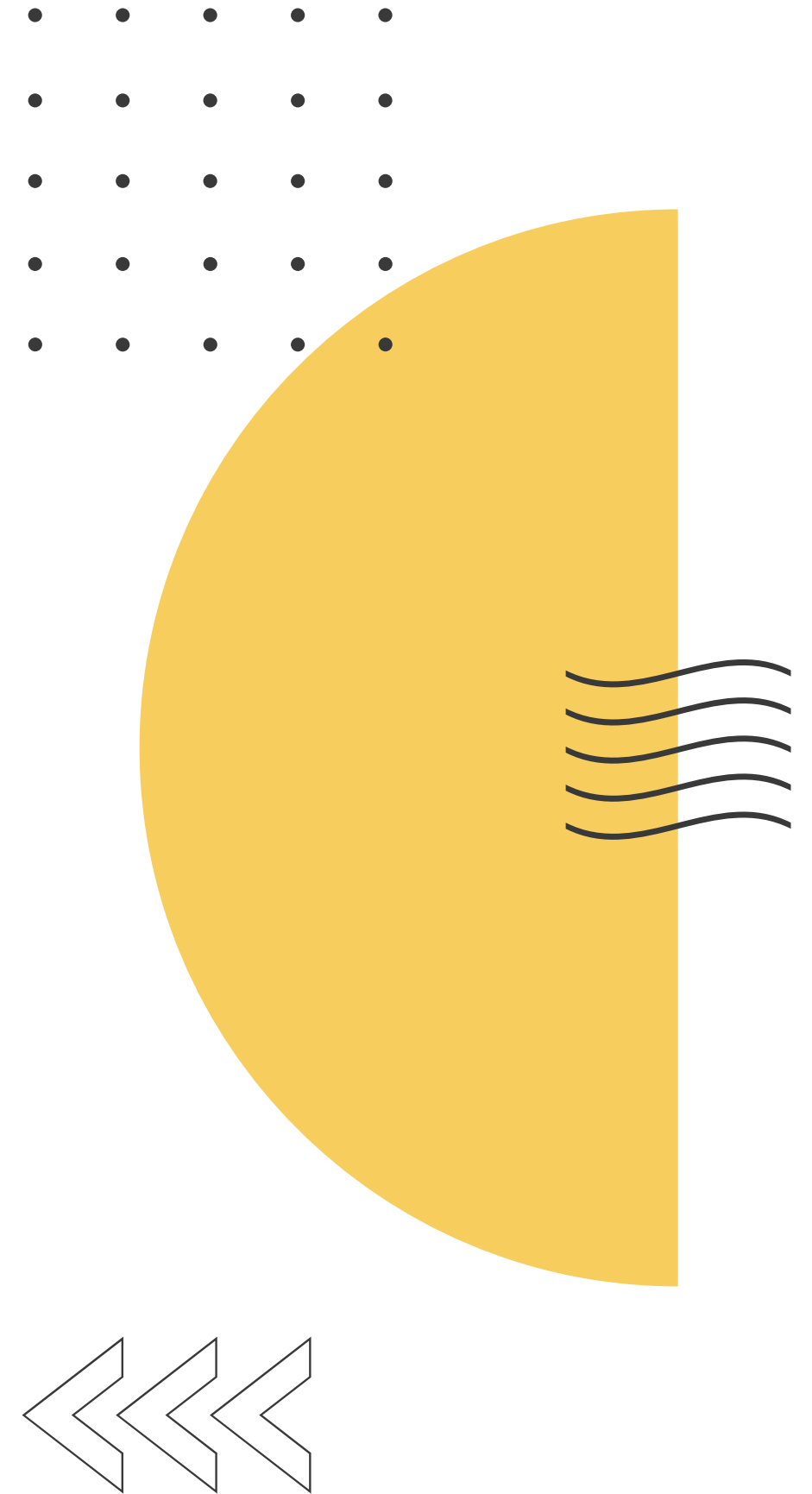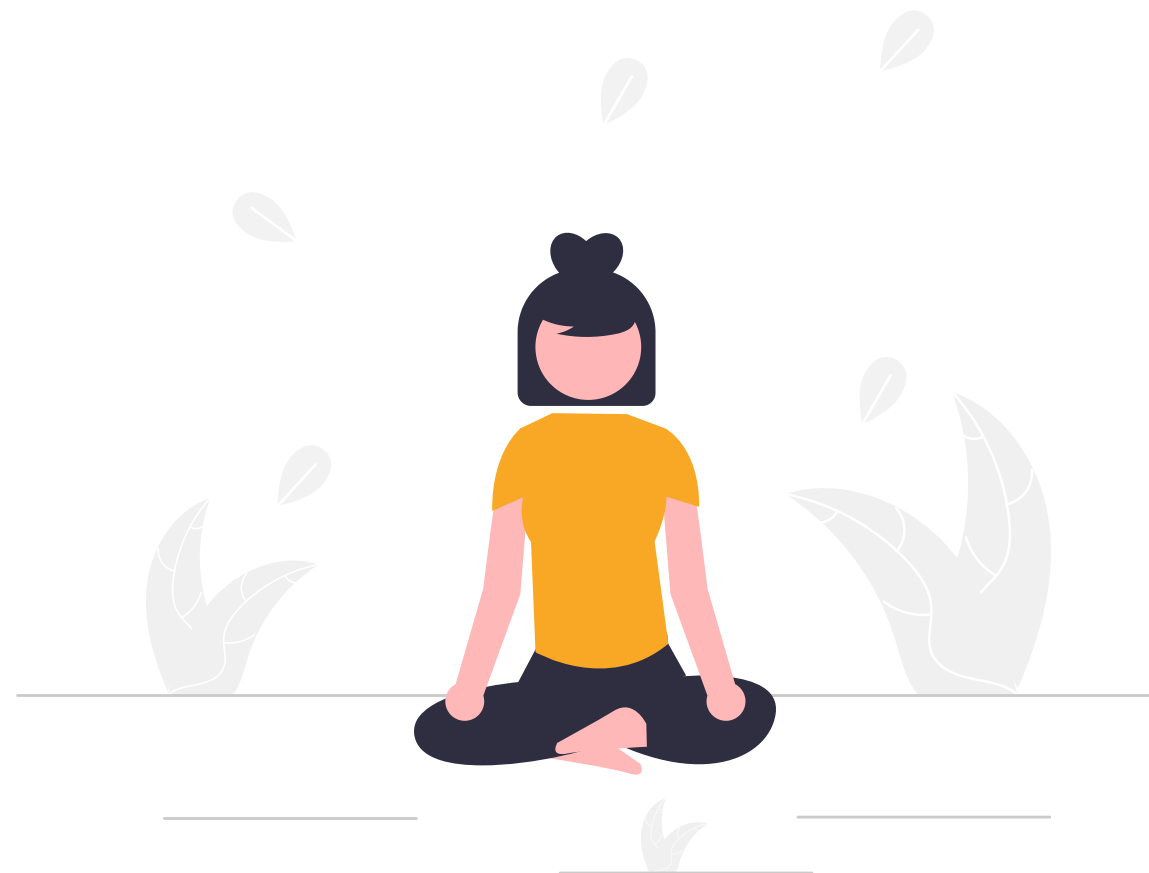
COMPONENT COMPOSITION

This activity ensures that the Architectural style of the system integrates the software components and form a working system. By identifying connection and coordination mechanisms of the system, the architecture describes the composition of the end product.

COMPONENT UPDATE:

This activity ensures the updation of reusable components. Sometimes, updates are complicated due to inclusion of third party (the organization that developed the reusable component may be outside the immediate control of the software engineering organization accessing the component currently.).

THANK YOU