

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Implementation details of Innovative Teaching Practices

Year / Semester / Section: II / III / A	Degree & Branch: B.E CSE
Course Code: CS8392	Course Name: Object Oriented Programming
Unit: II	Topic: Inheritance – Superclass and subclass
Activity Chosen: Simulation	

Details of the Implementation:

Faculty explains the specific topic in the classroom which includes the following

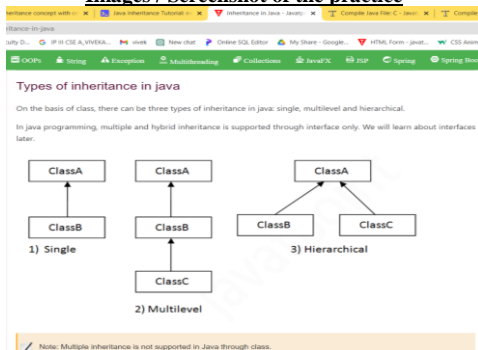
1. Define the purpose or Problem: Definition and Execution of program to create classes that are built upon existing classes, to specify a new implementation while maintaining the same behaviors, to reuse code
2. Analyze and identify appropriate tool: Use Javapoint.com for simulation
Link: <https://www.javatpoint.com/inheritance-in-java>
3. Conceptualize the model and run a first pass simulation: Try with the given code with programmer class and employee class.
4. Calibrate the simulation and analyze the results: Try with the given code for multiple inheritance and analyze why multiple inheritance is not supported in java.

Students are asked to try with remaining levels of inheritance and its solutions.

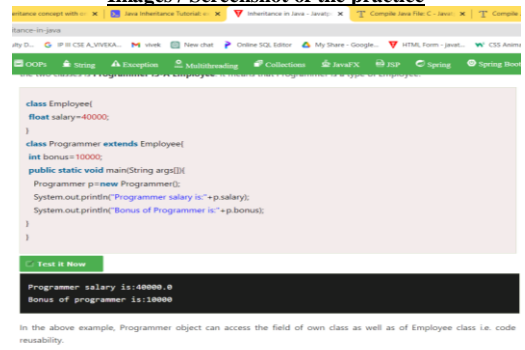
Faculty records their proceedings and measure students' progress before and after implementation

PO	PO1	PO2	PO3	PO5		
Relevance	3	2	2	2		

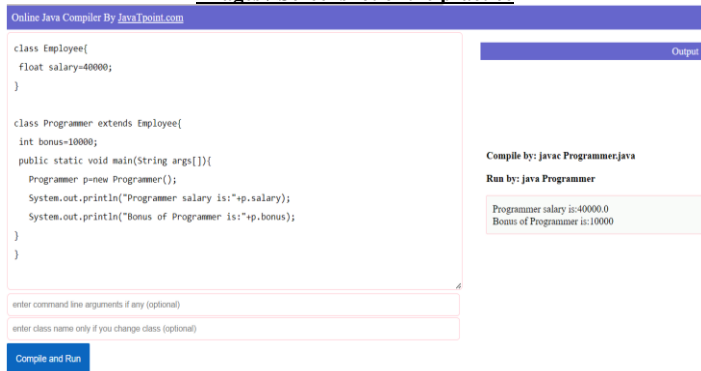
Images / Screenshot of the practice



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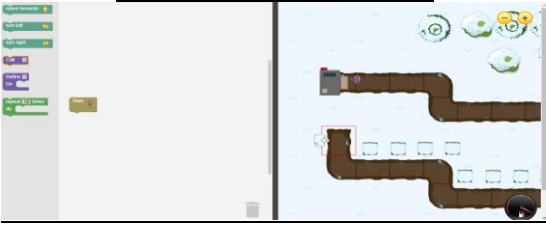
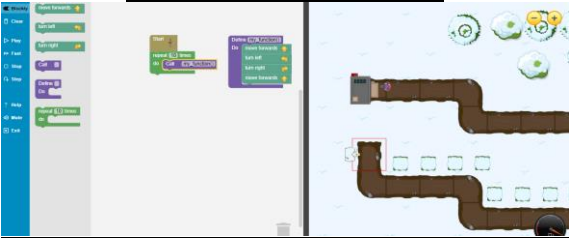

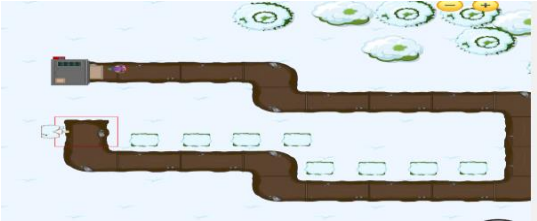


Benefit of the practice:

Simulation-based learning helps the students to understand how to create superclass and subclass, and how to reuse the class. Also it makes them understand the importance of code reusability.

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Implementation details of Innovative Teaching Practices

Year / Semester / Section: I/II/A				Degree & Branch: B.E CSE			
Course Code: CS3271				Course Name: Programming in C Laboratory			
Unit: III				Topic: Creation and execution of parameterized functions			
Activity Chosen: Simulation							
<p>Details of the Implementation: Faculty explains the specific concepts/topic in the classroom/laboratory which includes the following</p> <ol style="list-style-type: none"> 1. Define the purpose or Problem: Parameterized Functions– Functions are used for modular programming to reduce complexity and code reusability. Parameterized functions accept input and sometimes return results. 2. Analyze and identify appropriate tool: Use Code for Life to simulate 3. Conceptualize the model and run a first pass simulation: Play first three the levels in Procedure Module in Code for Life. 4. Calibrate the simulation and Analyze the results: Drag and place the appropriate blocks in the work area to complete the Simulation. <p>Students are asked to play the remaining levels using the tool for different situations. Faculty records their proceedings and measure students progress before and after implementation</p>							
PO	PO1	PO2	PO3	PO5			
Relevance	3	2	2	2			
<u>Images / Screenshot of the practice</u>				<u>Images / Screenshot of the practice</u>			
							
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<p>Benefit of the practice: Simulation-based learning helps the students to understand how to define a function, call the function and write elegant code. Also it makes them understand the importance of modularity and code reusability.</p>							

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Implementation details of Innovative Teaching Practices

Year / Semester / Section: I/I	Degree & Branch: B.E CSE
Course Code:	Course Name: Software Testing
Unit: V	Topic: Validation Testing
Activity Chosen: Simulation	

Details of the Implementation:

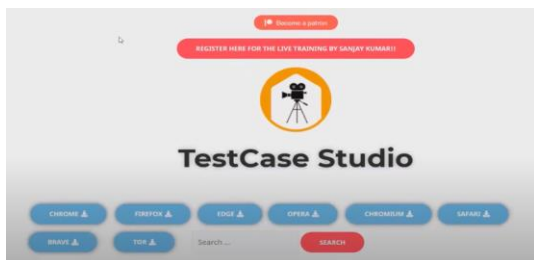
Faculty explains the specific concepts/topic in the classroom/laboratory which includes the following

1. Define the purpose or Problem: Designing Test cases allows us to define the possible user inputs and the expected output for the query
2. Analyze and identify appropriate tool: Use Test Case Studio to simulate test case design for a given website : <https://www.amazon.in>
3. Conceptualize the model and run a first pass simulation: Write few test cases for the specific website , to verify the functionality and expected result
4. Calibrate the simulation and analyze the results: Analyze the output obtained with that of the expected result and refine the design appropriately

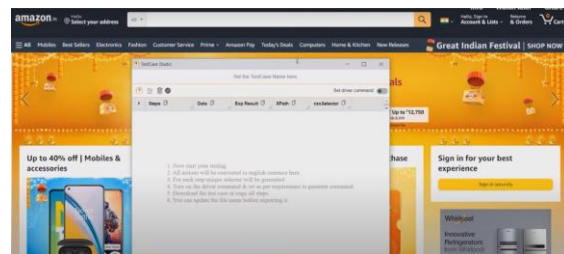
Students are asked to design the test cases for the given web site, and a given search , using the tool for different situations. Faculty will review the usage of such tools for designing web sites according to the user requirement .

PO	PO1	PO2	PO3	PO5		
Relevance	3	2	2	2		

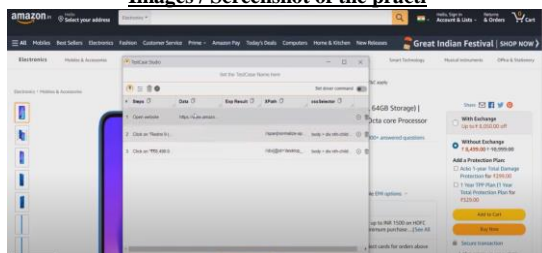
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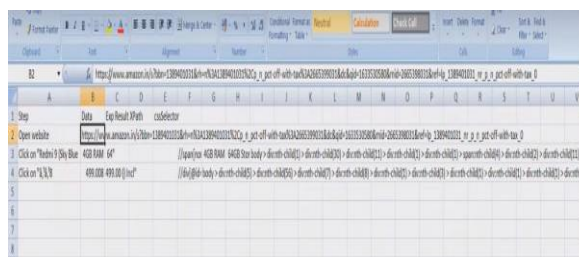
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Benefit of the practice:Simulation-based learning helps the students to understand Validation testing, by designing testcases and validate the functionality, using Test studio.Students will gain a better understanding on the testing process and design of a website .