

# Java institute for Advanced Technology

# Department of Examinations

## RESEARCH ASSESSMENT AND VIDEO SUBMISSION

COURSE(S) – (LEADING TO)	PROFESSIONAL GRADUATE DIPLOMA IN
	SOFTWARE ENGINEERING
UNIT NAME	WEB COMPONENT DEVELOPMENT I
UNIT ID	HF2J 04/EX/01
RESEARCH NAME	WEB COMPONENT DEVELOPMENT I – FINAL
	RESEARCH
DURATION	2 WEEKS

#### **INSTRUCTIONS TO CANDIDATES**

- Answer all questions.
- Maximum marks attainable for this paper is 100.

#### Font size, style, and type:

- The font must be a standard style that is clear and readable. Script, cursive, and pictorial fonts are prohibited.
- All document text with the exception of items embedded in figures must be black.
- Font size should be 11 or 12 points.
- Font style "Times New Roman".
- Italicized fonts are only accepted where allowed or required by your chosen style guide
- Font size and font type must be consistent throughout the text.
- Chapter titles and sections can be a larger font size than the standard text, if in accordance with the student's approved style guide and advisory committee. This style decision must be applied consistently throughout the text.
- The font size of tables and figures can be smaller than the standard text if in accordance with the student's style guide and advisory committee. This style decision must be applied consistently throughout the text. Font cannot be at less than 8 points to allow for readability.
- The spacing must be 1.15 spaces after each line.
- The Margins spaces on the sides of, and on the top and bottom.

#### RESEARCH ON WEB COMPONENT DEVELOPMENT I

We have now covered many different concepts relating to web component development I over the course of this unit, from individual methods and techniques to organization-wide strategies and practices. The purpose of this assignment is for you to apply what you have learned plus additional knowledge issues that you are acquainted with.

#### **Learning Outcomes:**

This assignment addresses the following unit learning outcomes:

- LO 1. Critically describe the servlet technology model, its life cycle as well as understand how to apply this knowledge professionally in web component development.
- LO 2. Describe the structure of a web application and accomplish successful deployment of web applications.
- LO 3. Understand the Web container model as well as understand how to apply this knowledge in Web component development in a professional manner.
- LO 4. Understand J2EE Session Management as well as understand how to apply this knowledge in web component development in a professional manner.
- LO 5. Understand the JavaServer Pages (JSP) Technology Model as well as understand how to apply this knowledge in Web component development in a professional manner.

### **SECTION A:**

Describe the following features of J2EE approaches to web component development practice.

#### You will be marked on:

Topic	Minimum word count
Introduction Java EE Application	200
The Servlet Technology Model (Lifecycle)	250
Java Server Pages (JSP) Technology Model (Lifecycle)	250
The Web Container	250
Session Management	250
Web Listener	250
References	References

#### **SECTION B:**

The following are J2EE approaches for web component development applications.

Submit videos on each topic to explain how to use it. The minimum time for one video is 10 minutes.

Topic	
How the Container handles a request	
How to use JSP and Servlet with web.xml	
How to use Session and Session tracking with Session	
Configuration	
How to use Servlet Context	
How to use Request Dispatcher	
How to use Web Listeners	