

## Instruction Sheet for the Candidate

<b>Qualification</b>	Back-end Developer ( <b>Mobile, Web and Game Development</b> )
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>• Implement Basic Programming Skills to apply Server-Side Architecture</li> <li>• Integrate Database with Server-Side Programming Language</li> <li>• Implement MVC Framework to Develop Web Application</li> <li>• Integrate Views and Partial Views with MVC</li> <li>• Integrate Template Engine with MVC Application</li> <li>• Prepare Web Views for Smart Devices</li> </ul>
<b>Purpose of Assessment</b>	Summative Assessment
<b>Candidate Details</b>	Name_____ Registration/Roll Number_____
<b>Guidance for Candidate</b>	<p><b>To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration &amp; assessment):</b></p> <p>Develop a web application that facilitates its users (university students) to list, select and update courses for current semesters. Every course consists of course title, course ID, course credits and timings. Application contains list.php (list of all courses offered in current semester), update.php (responsible to update any selected course detail), insert.php (insert selected course into database).</p> <p>Selected courses should not be overlapping. Implement a template engine for your web-application. Application should run smoothly on smart devices too.</p>
<b>Time: 04 Hrs.</b>	During a practical assessment, under observation by an assessor, you are required to:
<b>Minimum Evidence Required</b>	<p><b>Develop a web application that facilitates its users (university students) to list, select and update courses for current semesters. Every course consists of course title, course ID, course credits and timings. Application contains list.php (list of all courses offered in current semester), update.php (responsible to update any selected course detail), insert.php (insert selected course into database). Selected courses should not be overlapping. Implement a template engine for your web-application. Application should run smoothly on smart devices too.</b></p> <ol style="list-style-type: none"> <li>1. Create database schema as per requirements</li> <li>2. Create database as per schema</li> <li>3. Populate database with test data</li> <li>4. Develop web pages for the website</li> <li>5. Separate Model, View and Controller components</li> <li>6. Download and implement the template engine of your choice</li> </ol>

	<ol style="list-style-type: none"><li>7. Develop web-views for smart devices</li><li>8. Test the application</li></ol>
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## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	Back-end Developer <b>(Mobile, Web and Game Development)</b>
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>• Implement Basic Programming Skills to apply Server-Side Architecture</li> <li>• Integrate Database with Server-Side Programming Language</li> <li>• Implement MVC Framework to Develop Web Application</li> <li>• Integrate Views and Partial Views with MVC</li> <li>• Integrate Template Engine with MVC Application</li> <li>• Prepare Web Views for Smart Devices</li> </ul>
<b>Purpose of Assessment</b>	Summative Assessment
<b>Assessment Task</b>	Develop a web application that facilitates its users (university students) to list, select and update courses for current semesters. Every course consists of course title, course ID, course credits and timings. Application contains list.php (list of all courses offered in current semester), update.php (responsible to update any selected course detail), insert.php (insert selected course into database). Selected courses should not be overlapping. Implement a template engine for your web-application. Application should run smoothly on smart devices too.

I can.....

Performance Criteria	Yes	No
1. Create database schema as per requirements	<input type="checkbox"/>	<input type="checkbox"/>
2. Create database as per schema	<input type="checkbox"/>	<input type="checkbox"/>
3. Populate database with test data	<input type="checkbox"/>	<input type="checkbox"/>
4. Develop web pages for the website	<input type="checkbox"/>	<input type="checkbox"/>
5. Separate Model, View and Controller components	<input type="checkbox"/>	<input type="checkbox"/>
6. Download and implement the template engine of your choice	<input type="checkbox"/>	<input type="checkbox"/>
7. Develop web-views for smart devices	<input type="checkbox"/>	<input type="checkbox"/>
8. Test the application	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature\_\_\_\_\_ Assessor's Signature\_\_\_\_\_

Date: \_\_\_\_\_

## Assessors Judgment Guide

<b>Qualification</b>	Back-end Developer ( <b>Mobile, Web and Game Development</b> )
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<b>Purpose of Assessment</b>	Summative Assessment
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

## Observation Checklist

<b>Assessment Task</b>	Develop a web application that facilitates its users (university students) to list, select and update courses for current semesters. Every course consists of course title, course ID, course credits and timings. Application contains list.php (list of all courses offered in current semester), update.php (responsible to update any selected course detail), insert.php (insert selected course into database). Selected courses should not be overlapping. Implement a template engine for your web-application. Application should run smoothly on smart devices too.			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Create database schema as per requirements			
2.	Create database as per schema			
3.	Populate database with test data			
4.	Develop web pages for the website			
5.	Separate Model, View and Controller components			
6.	Download and implement the template engine of your choice			
7.	Develop web-views for smart devices			
8.	Test the application			
<b>Competent</b> <input type="checkbox"/>		<b>Not Yet Competent</b> <input type="checkbox"/>		

## Knowledge Assessment

<b>Qualification</b>	Back-end Developer ( <b>Mobile, Web and Game Development</b> )
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>Implement Basic Programming Skills to apply Server-Side Architecture</li> <li>Integrate Database with Server-Side Programming Language</li> <li>Implement MVC Framework to Develop Web Application</li> <li>Integrate Views and Partial Views with MVC</li> <li>Integrate Template Engine with MVC Application</li> <li>Prepare Web Views for Smart Devices</li> </ul>
<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span><b>COMPETENT</b> <input type="checkbox"/></span> <span><b>NOT YET COMPETENT</b> <input type="checkbox"/></span> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Can the View component directly fetch data from Model?		
2.	State a disadvantage of using MVC framework for a web-application.		
3.	Name any two frameworks other than MVC that are used to		

	develop web-applications.		
4.	Differentiate between a View and a Partial View.		
5.	Name any three features of smart devices.		
6.	What is node.js used for?		

<b>Feedback to the Candidate</b>	
Candidate's Signature _____	Assessor's Signature _____