

Instruction Sheet for the Candidate

Qualification	Back-end Developer (Mobile App, Web and Game Development)
Competency Standard	Implement MVC Framework for Server Side
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____
	Registration/Roll Number_____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration & assessment):</p> <ul style="list-style-type: none">• Explore MVC Options• Select MVC Framework• Implement Model Layer• Implement Controller Layer• Implement View Layer• Test the Implementation of MVC Architecture
Time: 03 Hrs.	During a practical assessment, under observation by an assessor, you are required to:

Minimum Evidence Required	<p>Explore MVC Options</p> <ol style="list-style-type: none"> 1. Search MVC options available in Market 2. Identify the features of every MVC framework <p>Select MVC Framework</p> <ol style="list-style-type: none"> 1. Compare the features of every MVC framework 2. Select a MVC framework as per requirements <p>Implement Model Layer</p> <ol style="list-style-type: none"> 1. Identify model entities 2. Write methods/classes to store data into model 3. Write methods/classes to update data into model 4. Write method/classes to retrieve data from model 5. Apply constraints on model operations <p>Implement Controller Layer</p> <ol style="list-style-type: none"> 1. Identify the controller scenarios of application 2. Implement the controller component of application <p>Implement View Layer</p> <ol style="list-style-type: none"> 1. Identify the view classes 2. Implement view classes, interfaces and methods <p>Test the Implementation of MVC Architecture</p> <ol style="list-style-type: none"> 1. Develop test cases for model, view and controller classes 2. Execute test cases 3. Fix the bugs if found
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Back-end Developer (Mobile App, Web and Game Development)
Competency Standard	Implement MVC Framework to Develop Web Application
Purpose of Assessment	Formative Assessment
Assessment Task	<ul style="list-style-type: none"> • Explore MVC Options • Select MVC Framework • Implement Model Layer • Implement Controller Layer • Implement View Layer • Test the Implementation of MVC Architecture

I can.....

Performance Criteria	Yes	No
1. Search MVC options available in Market	<input type="checkbox"/>	<input type="checkbox"/>

2. Identify the features of every MVC framework	<input type="checkbox"/>	<input type="checkbox"/>
3. Compare the features of every MVC framework	<input type="checkbox"/>	<input type="checkbox"/>
4. Select a MVC framework as per requirements	<input type="checkbox"/>	<input type="checkbox"/>
5. Identify model entities	<input type="checkbox"/>	<input type="checkbox"/>
6. Write methods/classes to store data into model	<input type="checkbox"/>	<input type="checkbox"/>
7. Write methods/classes to update data into model	<input type="checkbox"/>	<input type="checkbox"/>
8. Write method/classes to retrieve data from model	<input type="checkbox"/>	<input type="checkbox"/>
9. Apply constraints on model operations	<input type="checkbox"/>	<input type="checkbox"/>
10. Identify the controller scenarios of application	<input type="checkbox"/>	<input type="checkbox"/>
11. Implement the controller component of application	<input type="checkbox"/>	<input type="checkbox"/>
12. Identify the view classes	<input type="checkbox"/>	<input type="checkbox"/>
13. Implement view classes, interfaces and methods	<input type="checkbox"/>	<input type="checkbox"/>
14. Develop test cases for model, view and controller classes	<input type="checkbox"/>	<input type="checkbox"/>
15. Execute test cases	<input type="checkbox"/>	<input type="checkbox"/>
16. Fix the bugs if found	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	Back-end Developer (Mobile App, Web and Game Development)
Competency Standard	Implement MVC Framework to Develop Web Application
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	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

Assessment Task	<ul style="list-style-type: none"> Explore MVC Options Select MVC Framework Implement Model Layer Implement Controller Layer Implement View Layer Test the Implementation of MVC Architecture 			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Search MVC options available in Market			
2.	Identify the features of every MVC framework			
3.	Compare the features of every MVC framework			
4.	Select a MVC framework as per requirements			
5.	Identify model entities			
6.	Write methods/classes to store data into model			
7.	Write methods/classes to update data into model			
8.	Write method/classes to retrieve data from model			
9.	Apply constraints on model operations			
10.	Identify the controller scenarios of application			
11.	Implement the controller component of application			
12.	Identify the view classes			
13.	Implement view classes, interfaces and methods			
14.	Develop test cases for model, view and controller classes			
15.	Execute test cases			
16.	Fix the bugs if found			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	Back-end Developer (Mobile App, Web and Game Development)
Competency Standard	Implement MVC Framework to Develop Web Application
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </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.	Does MVC support loose coupling? Give an example.		
2.	In a MVC based web application, what does the Control component is responsible for?		
3.	Which component of MVC framework is responsible to show data (the output of application) to users?		

4.	Name any two MVC implementations available in market.		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____