# Instruction Sheet for the Candidate

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|---|---|
| **Qualification** | Full Stack Developer **(Mobile App, Web and Game Development)** |
| **Competency Standard** | Program a Server Side (using PHP, Python, Node JS) |
| **Purpose of Assessment** | Formative Assessment |
| **Candidate Details** | Name_____<br><br>Registration/Roll Number_____ |
| **Guidance for Candidate** | **To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration & assessment):**<br><br>• Identify the architecture of web application<br>• Manage Resources<br>• Develop robust application<br>• Perform testing of application |
| **Time: 03 Hrs.** | During a practical assessment, under observation by an assessor, you are required to: |
| **Minimum Evidence Required** | **Identify the architecture of web application**<br>  1. Compare available development technologies<br>  2. Choose the suitable technology<br>  3. Develop high-quality software design and architecture<br>  4. Identify suitable tools for programming<br>  5. Identify the scope of project<br>  6. Prepare a list of tasks<br>  7. Prioritize the tasks<br>  8. Design the architecture<br>**Manage Resources**<br>  1. Identify the computing resources requirements<br>  2. Make computing resource available<br>  3. Install best suitable technology for development<br>  4. Configure web development technology for development<br>**Develop robust application**<br>  1. Develop applications by producing clean, efficient code<br>  2. Automate tasks through appropriate tools and scripting<br>  3. Prepare Development Document<br>**Perform testing of application**<br>  1. Debug the code<br>  2. Perform validation and verification testing<br>  3. Ensure software is up-to-date with latest technologies |

# Self-Assessment Checklist

| Candidate Name | |
|---|---|
| **Registration No.** | |
| **Qualification** | Full Stack Developer **(Mobile App, Web and Game Development)** |
| **Competency Standard** | Program a Server Side (using PHP, Python, Node JS) |
| **Purpose of Assessment** | Formative Assessment |
| **Assessment Task** | • Identify the architecture of web application<br>• Manage Resources<br>• Develop robust application<br>• Perform testing of application |

I can………………

| Performance Criteria | Yes | No |
|---|:---:|:---:|
| 1. Compare available development technologies | ☐ | ☐ |
| 2. Choose the suitable technology | ☐ | ☐ |
| 3. Develop high-quality software design and architecture | ☐ | ☐ |
| 4. Identify suitable tools for programming | ☐ | ☐ |
| 5. Identify the scope of project | ☐ | ☐ |
| 6. Prepare a list of tasks | ☐ | ☐ |
| 7. Prioritize the tasks | ☐ | ☐ |
| 8. Design the architecture | ☐ | ☐ |
| 9. Identify the computing resources requirements | ☐ | ☐ |
| 10. Make computing resource available | ☐ | ☐ |
| 11. Install best suitable technology for development | ☐ | ☐ |
| 12. Configure web development technology for development | ☐ | ☐ |
| 13. Develop applications by producing clean, efficient code | ☐ | ☐ |
| 14. Automate tasks through appropriate tools and scripting | ☐ | ☐ |
| 15. Prepare Development Document | ☐ | ☐ |
| 16. Debug the code | ☐ | ☐ |
| 17. Perform validation and verification testing | ☐ | ☐ |
| 18. Ensure software is up-to-date with latest technologies | ☐ | ☐ |

Candidate's Signature_____ Assessor's Signature_____

Date: _____

# Assessors Judgment Guide

| Qualification | **Full Stack Developer (Mobile App, Web and Game Development)** |
|---|---|
| **Competency Standard** | Program a Server Side (using PHP, Python, Node JS) |
| **Purpose of Assessment** | Formative Assessment |
| **Candidate Details** | Name: _____<br><br>Registration/Roll Number: _____ Signature: _____ |
| **Assessment Outcome** | **COMPETENT** ☐             **NOT YET COMPETENT** ☐<br><br>**Name of the Assessor**_____<br><br>**Assessor's code:** _____<br><br>**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><li>Identify the architecture of web application</li><li>Manage Resources</li><li>Develop robust application</li><li>Perform testing of application</li></ul> | | | |
|---|---|---|---|---|
| **During the practical assessment, candidate demonstrated the following:** | | **Yes** | **No** | **Remarks** |
| 1. | Compare available development technologies | | | |
| 2. | Choose the suitable technology | | | |
| 3. | Develop high-quality software design and architecture | | | |
| 4. | Identify suitable tools for programming | | | |
| 5. | Identify the scope of project | | | |
| 6. | Prepare a list of tasks | | | |
| 7. | Prioritize the tasks | | | |
| 8. | Design the architecture | | | |
| 9. | Identify the computing resources requirements | | | |
| 10. | Make computing resource available | | | |
| 11. | Install best suitable technology for development | | | |
| 12. | Configure web development technology for development | | | |
| 13. | Develop applications by producing clean, efficient code | | | |
| 14. | Automate tasks through appropriate tools and scripting | | | |
| 15. | Prepare Development Document | | | |
| 16. | Debug the code | | | |
| 17. | Perform validation and verification testing | | | |
| 18. | Ensure software is up-to-date with latest technologies | | | |

| Competent ☐ | Not Yet Competent ☐ |
|---|---|

# Knowledge Assessment

| | |
|---|---|
| **Qualification** | Full Stack Developer **(Mobile App, Web and Game Development)** |
| **Competency Standard** | Program a Server Side (using PHP, Python, Node JS) |
| **Purpose of Assessment** | Formative Assessment |
| **Candidate Details** | Name: _____<br><br>Registration/Roll Number: _____  Candidate Signature: _____ |
| **Assessment Outcome** | COMPETENT ☐                    NOT YET COMPETENT ☐<br><br>Name of the Assessor: _____<br><br>Assessor's code: _____<br><br>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. Name any two programming languages used to develop server side for a web application. | | |
| 2. What is meant by the scope of a project? | | |
| 3. What is meant by a resource hungry application? | | |

| Feedback to the Candidate |
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| **Candidate's Signature**_____ **Assessor's Signature** _____ |