

## Instruction Sheet for the Candidate

|                                  |   |
|----------------------------------|---|
| <b>Qualification</b>             | Android Developer ( <b>Mobile App, Web &amp; Game Development</b> )   |
| <b>Competency Standard</b>       | Program/use background applications   |
| <b>Purpose of Assessment</b>     | Formative Assessment  |
| <b>Candidate Details</b>         | Name_____<br>Registration/Roll Number_____  |
| <b>Guidance for Candidate</b>    | <p><b>To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration &amp; assessment):</b></p> <ul style="list-style-type: none"> <li>• Run background tasks</li> <li>• Authorize/ Use APIs in code</li> <li>• Mange notifications</li> <li>• Make Application for backward compatible</li> </ul>  |
| <b>Time: 03 Hrs.</b>             | During a practical assessment, under observation by an assessor, you are required to  |
| <b>Minimum Evidence Required</b> | <p><b>Run background tasks</b></p> <ol style="list-style-type: none"> <li>1. Add background threads to run a task in the background.</li> <li>2. Enable app to connect to the internet using a background task.</li> <li>3. Update task keeps running if the user changes their device's orientation.</li> <li>4. Responds to a system broadcast.</li> <li>5. Send and receive a custom broadcast.</li> <li>6. Use JobScheduler to schedule tasks in a way that reduces battery drain.</li> <li>7. Schedule and cancel an alarm.</li> <li>8. Create code to integrate API</li> </ol> <p><b>Authorize/ Use APIs in code</b></p> <ol style="list-style-type: none"> <li>1. Authorize API</li> <li>2. Use REST API</li> <li>3. Use Google APIs</li> </ol> <p><b>Mange notifications</b></p> <ol style="list-style-type: none"> <li>1. Send a notification.</li> <li>2. Update a notification.</li> </ol> <p><b>Make Application for backward compatibility</b></p> <ol style="list-style-type: none"> <li>1. Use Android Support libraries</li> <li>2. Use support libraries to get backward compatible version of new Android features</li> </ol> |

## Self-Assessment Checklist

|                              |   |
|------------------------------|---|
| <b>Candidate Name</b>        |   |
| <b>Registration No.</b>      |   |
| <b>Qualification</b>         | Android Developer <b>(Mobile App, Web &amp; Game Development)</b>   |
| <b>Competency Standard</b>   | Program/use background applications   |
| <b>Purpose of Assessment</b> | Formative Assessment  |
| <b>Assessment Task</b>       | <ul style="list-style-type: none"> <li>Run background tasks</li> <li>Authorize/ Use APIs in code</li> <li>Manage notifications</li> <li>Make Application for backward compatible</li> </ul> |

I can.....

| <b>Performance Criteria</b>  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| 1. Add background threads to run a task in the background.                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Enable app to connect to the internet using an background task.           | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Update task keeps running if the user changes their device's orientation. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Responds to a system broadcast.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Send and receive a custom broadcast.                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Use JobScheduler to schedule tasks in a way that reduces battery drain.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Schedule and cancel an alarm.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Create code to integrate API  | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Authorize API   | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Use REST API   | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Use Google APIs  | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Send a notification.   | <input type="checkbox"/> | <input type="checkbox"/> |

|  |                          |                          |
|--|--------------------------|--------------------------|
| 13. Update a notification.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Explore Android Support libraries  | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Use support libraries to get backward compatible version of new Android features | <input type="checkbox"/> | <input type="checkbox"/> |

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

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

## Assessors Judgment Guide

|                              |  |
|------------------------------|--|
| <b>Qualification</b>         | Android Developer ( <b>Mobile App, Web &amp; Game Development</b> )  |
| <b>Competency Standard</b>   | Program/use background applications  |
| <b>Purpose of Assessment</b> | Formative Assessment   |
| <b>Candidate Details</b>     | Name: _____<br>Registration/Roll Number: _____ Signature: _____  |
| <b>Assessment Outcome</b>    | <p>COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/></p> <p>Name of the Assessor _____</p> <p>Assessor's code: _____</p> <p>Signature: _____</p> |

| Assessment Summary (to be filled by the assessor) |        |        |
|---|--------|--------|
| Activity  | Method | Result |

| Nature of Activity            | Written | Oral | Observation | Portfolio | Role Play | Competent | Not Yet<br>Competent |
|-------------------------------|---------|------|-------------|-----------|-----------|-----------|----------------------|
| Practical Skill Demonstration |         |      | ✓           |           |           |           |                      |
| Knowledge Assessment          |         | ✓    |             |           |           |           |                      |
| Other Requirement             |         |      |             |           |           |           |                      |

## Observation Checklist

|   |  |  |           |                |
|---|--|--|-----------|----------------|
| <b>Assessment Task</b>  | <ul style="list-style-type: none"> <li>Run background tasks</li> <li>Authorize/ Use APIs in code</li> <li>Mange notifications</li> <li>Make Application for backward compatible</li> </ul> |  |           |                |
| <b>During the practical assessment, candidate demonstrated the following:</b> |  | <b>Yes</b>                                 | <b>No</b> | <b>Remarks</b> |
| 1.  | Add background threads to run a task in the background.  |  |           |                |
| 2.  | Enable app to connect to the internet using a background task.   |  |           |                |
| 3.  | Update task keeps running if the user changes their device's orientation.  |  |           |                |
| 4.  | Responds to a system broadcast.  |  |           |                |
| 5.  | Send and receive a custom broadcast.   |  |           |                |
| 6.  | Use JobScheduler to schedule tasks in a way that reduces battery drain.  |  |           |                |
| 7.  | Schedule and cancel an alarm.  |  |           |                |
| 8.  | Create code to integrate API   |  |           |                |
| 9.  | Authorize API  |  |           |                |
| 10.   | Use REST API   |  |           |                |
| 11.   | Use Google APIs  |  |           |                |
| 12.   | Send a notification.   |  |           |                |
| 13.   | update a notification.   |  |           |                |
| 14.   | Explore Android Support libraries  |  |           |                |
| 15.   | Use support libraries to get backward compatible version of new Android features   |  |           |                |
| Competent <input type="checkbox"/>  |  | Not Yet Competent <input type="checkbox"/> |           |                |

## Knowledge Assessment

|                              |   |
|------------------------------|---|
| <b>Qualification</b>         | Android Developer (Mobile App, Web & Game Development)  |
| <b>Competency Standard</b>   | Program/use background applications   |
| <b>Purpose of Assessment</b> | Formative Assessment  |
| <b>Candidate Details</b>     | Name: _____<br>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: _____<br>Assessor's code: _____<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.  | Define threads.                |              |                  |
|   |                                |              |                  |
| 2.  | How to create notifications?   |              |                  |
|   |                                |              |                  |
| 3.  | How to minimize battery drain? |              |                  |

|    |                                    |  |  |
|----|------------------------------------|--|--|
|    |                                    |  |  |
| 4. | How to manage background threads?  |  |  |
|    |                                    |  |  |
| 5. | How to send a system broadcast?    |  |  |
|    |                                    |  |  |
| 6. | How to receive a system broadcast? |  |  |
|    |                                    |  |  |

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