

PREPARATION GUIDELINES

IT Software Solution for Business (ITSSB)

Dare to Dream, Unleash Your Talent!

JuniorSkills Championship



ABOUT SKILL

IT Software Solutions for Business is to give opportunity to candidates to build solutions to solve problems in society, using mobile applications.

The knowledge & understanding of this skill will empower candidates to think & build an end-to-end mobile application for a given business problem.

This skill needs one to build mobile applications that combine fail-safe operation on an Android mobile with a user-friendly interface and multifunctionality.

By practicing this skill one can work as a mobile app developer in IT Industry or as a freelancer.

SKILL COMPETITIONS

There will be 4 rounds in Junior Skills Competition. Each test project will consist of points mentioned below in the respective round:

Round 1: Screening Round (60-Multiple Choice Questions)

- Knowledge of MySQL Database Operations (using SQL)
- Fundamentals of Programming (such as Loops, Conditional Statements, Logical & Arithmetical Operations, Variables, Functions)
- Basics of Java Programming (such as OOPS)

Round 2: Qualifying Round (Problem-Statement based Test Project)

- Build UI for given problem statement
- Fetch data from API given in test project

Round 3: Pre-Nationals (Problem-Statement based Test Project)

- Build UI for given problem statement
- Build API
- Fetch Data from API

Round 4: Nationals (Problem-statement based Test Project)

- Build UI for given problem statement
- Build API & fetch application content

REFERENCE LINKS

Round 1

SQL (W3Schools)

- <https://www.youtube.com/watch?v=zbMHLJ0dY4w>
- https://www.w3schools.com/sql/sql_create_db.asp

Fundamentals of Programming with Java

- <https://www.guru99.com/java-tutorial.html>

Round 2, 3, 4

Android App Development

- <https://www.youtube.com/watch?v=FfgQRIR7YXY> [Build basic Android App using Java]
- <https://www.udemy.com/course/complete-android-n-developer-course/?altsc=428526> [Complete Course]
- <https://developer.android.com/guide/topics/ui> [Android App UI-Development]

Backend API Development using Java

- <https://www.youtube.com/watch?v=MWLe1tgPmUo>

Standard Coding Practices

- <https://www.codejava.net/coding/10-java-core-best-practices-every-java-programmer-should-know>
- <https://www.clariontech.com/blog/android-coding-standards-best-practices>

Improve typing speed

- <https://www.typing.com/student/game/ztype>