

Standard Operating Procedure (SOP)

Company Training Device Cloud – Onboarding and Training Program

Objective

To standardize the training process for new joiners in the Device Cloud team, ensuring they understand the required tools, codebase, and infrastructure, and can contribute effectively within 3 months.

Phase 1: Language and Tools Training (5 – 7 Days)

Objective: Trainees with foundational knowledge of programming and relevant tools.

- Assign language modules (e.g., Java, Android – based on requirement).
- Introduction to Git, Bitbucket, and VSCode/Xcode/Android Studio.
- Appium & Selenium Research.
- Daily hands-on coding practice.
- Completion of assigned language tasks.
- Submission of mini projects (optional).

<https://bitbucket.org/>

<https://xcodereleases.com/>

<https://developer.android.com/studio>

https://code.visualstudio.com/?wt.mc_id=vscom_downloads

Phase 2: Appium & Selenium Research (15 Days)

Objective: Build automation knowledge focused on Appium (mobile) and Selenium (web) based on requirements

Tasks:

- Self-guided research with internal/external documentation.
- Setup Appium and Selenium test environment.
- Write basic test cases for real and emulator devices.
- Explore WebDriverAgent (iOS) and UiAutomator2 (Android).
- Deliverables:
- Demo of at least one test run on the device cloud.
- Documentation of learning

<https://appium.io/docs/en/2.1/quickstart/install/>

<https://appium.io/docs/en/2.1/quickstart/uiauto2-driver/>

<https://googlechromelabs.github.io/chrome-for-testing/#stable>

Phase 3: Product Overview (4-5 Days)

Objective: Understand the company's Device Cloud architecture, components, and features.

- Attend product walkthrough sessions.
- Explore existing UI dashboards, APIs, and backend services.
- Learn how devices are listed, reserved, and controlled remotely.
- Deliverables:
- Presentation on understanding of the product.
- 1-on-1 discussion with a mentor or tech lead.

Phase 4: Code Review and Analysis (1 Month)

Objective: Deep dive into the codebase and understand core components.

- Give code access for review.
- Clone and build the core Device Cloud project.
- Review each module in depth..
- Participate in team code reviews.
- Track understanding via documentation or mind maps.
- Submit weekly code review summaries.

Phase 5: Code Flow & Architecture Explanation (15 Days)

Objective: Understand and explain code interaction and flow.

- Tasks:
- Draw sequence diagrams and flowcharts for:
 - Device reservation
 - Test execution
 - Screenshot streaming
 - Log collection
- Discuss how microservices or modules interact.
- Shadow senior team members.
- Deliverables:
- Documented flow diagrams.
- Recorded explanation or live session with mentor.

<https://docs.google.com/spreadsheets/d/1T0XV0MRpwliftJh3cf90JuJASrtI3FHrNIMMWrbAOmY/edit?gid=0#gid=0>

https://docs.google.com/spreadsheets/d/1XwRV0bpZpwpsWuPMJs7Z1kbkIS_6ehH1F3FoWdqQRDY/edit?gid=0#gid=0

Phase 6: Server Access & Device Connectivity (Ongoing)

Objective: Ensure access to infrastructure and resolve real-time device issues.

- Tasks:
- Gain SSH access to staging/dev servers.
- Learn to debug iOS/Android device issues.
- Run ideviceinstaller, and adb-related tools.
- Collect logs for connection errors.
- Deliverables:
- Log samples and root cause analysis of 2–3 real issues.
- Device stability report.

Phase 7: Task Assignment & Contribution (Ongoing)

Objective: Apply learnings by contributing to real features or bug fixes.

- Follow internal PR review guidelines.
- Deliverables:
- Merge of at least 2–3 PRs.
- Participation in sprint meetings.