**TEST STRATEGY FOR OLA APP LAUNCH**

**Goal:**

Release the Ola app with confidence and minimal post-release defects, ensuring a seamless experience for riders and drivers.

**1. High-Level Approach**

* **Risk-Based Prioritization**

Focus on core journeys:

* + User registration & login
  + Booking a ride (auto, cab, bike)
  + Real-time tracking
  + Payments (wallet, UPI, cards)
  + Driver assignment & communication
  + Ride completion & feedback
* **Automate Regression**

Automate:

* + Smoke tests (app launch, login, booking flow)
  + Top 40 critical regression scenarios (e.g., fare calculation, payment success, driver assignment)
* **CI Gating**

Every PR trigger:

* + Unit tests
  + Smoke tests
  + Top regression tests
  + Nightly full regression on staging environment
* **Performance & Load Testing**

Simulate:

* + 10,000+ concurrent users booking rides
  + Surge pricing scenarios
  + Peak hours (e.g., 9 AM, 6 PM)
* **Security Review** 
  + Static code analysis (SAST) for mobile and backend
  + Dynamic penetration testing (DAST) for:
  + Payment flows
  + User data access
  + Driver location tracking
* **Compatibility Testing** 
  + Mobile OS: Android (10–13), iOS (14–17)
  + Devices: Top 10 Android & iOS models in India
  + Network conditions: 2G, 3G, 4G, 5G, Wi-Fi
* **Release Strategy** 
  + Feature flags for new ride types or payment methods
  + Canary release to 5% of users in Hyderabad
  + Staged rollout with real-time monitoring

**2.** **Release Checklist**

* Smoke tests pass on release candidate build
* Automated regression suite (critical flows) passes
* Performance test results meet SLAs (e.g., <2s booking response time)
* Security scan results reviewed and approved
* UAT sign-off completed by Product, QA, and Ops
* Rollback plan documented and tested
* Monitoring dashboards (e.g., Firebase, Datadog, New Relic) are live and validated

**3. Post-Launch Monitoring KPIs**

* Crash Rate – Target < 1% across devices
* Error 5xx Rate – Monitor backend failures (e.g., booking, payments)
* Key Transaction Success Rate – Booking, payment, ride completion
* CPU/Memory Usage Trends – Especially on low-end Android devices
* Time to Detect & Rollback – Alert within 5 mins, rollback within 15 mins if needed