

Mobile Applications

Project Kickoff
08/24/2020



Agenda

- TEAM INTRODUCTION
- FOUNDATION PLAN
- NEXT STEPS
- GOVERNANCE & REPORTING



Rajashekar – iOS Developer



Software Developer | Backend

8 years of experience in iOS application development and having knowledge of Android.

Tech Skills

Objective-C, Swift, java, Consuming Web Service, XML, JSON parsing, Push notification, Offline data storage, in-app purchases, Writing unit test cases.

Tools Knowledge

GitHub, gitlab, SVN, Bitbucket.CI/CD pipeline, jira, xcode, PostMan, Xcode debugging tools.

Application Development

Extensive knowledge in iOS application development from scratch to app Store.

Domain Knowledge

Automobiles, Loyalty card, Education, Fitness/HealthCare, e-commerce, EPUB, Tourism.

Personal Interests and Hobbies

Playing sports, watching movies, listening music, learning new technologies.



Raghavendra – Android Developer



Senior Software Engineer | Mobile

5 Years of IT Experience in development of mobile applications and wrapper services.

Tech Skills

Java | Kotlin | Android | XML | SQLite | Room DB

Tools Knowledge

Android Studio, JIRA, MS Office Suite, PostMan, Eclipse, IntelliJ.

Application Development

Executed various engagements involving development of customer facing mobile applications.

Domain Knowledge

Travel, Education and Service Sector.

Personal Interests and Hobbies

Exploring new technologies and their implementations, Providing Solutions, Cricket Sports.



Roshni – Mobile QA



Software Testing|Web and Mobile

5 Years of IT Experience in manual and automation testing with web and mobile applications.

Tech Skills

Appium | Selenium Webdriver | Java | PeopleSoft Test Framework (Oracle Tool)

Tools Knowledge

JIRA, Jenkins, MS Office Suite, Eclipse, IntelliJ, Cucumber, Agile

Application Testing

Executed the Tests and found critical bugs that helped to improve the quality of product for both web and mobile applications (iOS and Android).

Domain Knowledge

Travel, Sales, HRMS

Personal Interests and Hobbies

Learn and explore new technologies, Listening Music.



Foundation Phase

Week	Planned Outcome
Week 1 - Setup <ul style="list-style-type: none"> - Environment Setup - Creation of IDs - Access to servers - Overview of the Product <p style="text-align: right;">Induction</p>	Development Environment Setup Access Product Induction session(s)
Week 1 - Induction <ul style="list-style-type: none"> - Overview of Various Mobile Applications & High Level Code structure - Understanding code, modules, libs, Assess bugs in JIRA & Deep Dive Datix Anywhere application - Pick up simple complex tech debts 	Architecture Overview and Functional knowledge sessions Simple Tickets
Milestone #1 - Induction Complete	
Week 2 - Ram Up <ul style="list-style-type: none"> - Fix first ticket for each developer - Understand the process - PR, Merge, Release - Deep Dive into Key modules (1-2) - Understanding key modules 	3-5 Priority Tickets
Week 3 - Ram Up <ul style="list-style-type: none"> - Continue to pick up simple tickets, based on modules of KT - Deep Dive of modules(3-4) - self study of modules (3-4) 	5-7 Priority Tickets
Milestone #2 - RamUp Complete & Initiate Measured Support	



Foundation Phase - Outcome

- ❖ Dev & QE setup of EDC Complete
- ❖ Access to code and document repositories
- ❖ Business and Functional Knowledge
- ❖ Clarity on Framework(s) & Architecture.
- ❖ Familiarity of Code Structure and Flow
- ❖ Knowledge on delivery lifecycle Process
- ❖ Definition of “Done”
- ❖ Goal setting for EDC productivity
- ❖ Plans and priorities for EDC



Next Steps

Tasks	Owner	Date
Access to Git, Environments, Confluence (Doc Repo & JIRA)	Aaron D	08/24/2020
Schedule application (functional & technical) overview sessions	Suresh P	08/25/2020
Understand Datix Anywhere Technical Assessment	Mobile Team	08/26/2020
Start fixing Tech Debts	Mobile Team	08/27/2020
Discuss and agree on the QE Process & Acceptance Criteria	Suresh & Roshni	08/28/2020



Governance & Reporting

Architecture Review



Solution Architect
Technical Lead

- Input: Requirement and scope
- Output:
 - Tools, technology, frameworks to be used
 - Coding and process guidelines
 - CTO Review

Daily Scrum call



Scrum Master
Team

- Input: Git, JIRA
- Output:
 - JIRA Updates
 - Resolve Impediments
 - Risks and Issues update
 - Code check-in with Pull requests and code reviews

Weekly Status Reports



Client Dev Director
Accion Engagement Manager
Accion Delivery Manager

- Will combine mobile team updates with current weekly report
- Input: Weekly PPP
- Output:
 - Accomplishments
 - Sprint progress
 - Resource Utilization
 - Risk Mitigation
 - RAID Log

Bi-weekly meeting and Review



Client Sponsor, Product Owner
Accion Sponsor, Engagement Manager, Delivery Manager

- Will combine mobile team updates along with current Bi-weekly report
- Input: Bi Weekly Leadership Update
- Output:
 - Risk Mitigation Plans of projects
 - Resource Requirements
 - Budgetary Approvals
 - Incremental deliveries of "Done" product



Accion PMO

EDC Time Zone - The Fact and how we work

- India follows the Indian Standard time. This time zone is different from that followed by the countries in the other parts of the world, where in for:
 - British Standard Time is 4 hours and 30 minutes behind of Indian Standard Time
- EDC team would make sure there is overlap of 2-4 working hours
- The team leaders (TL, SM, BA) - will be available for extended hours on emails, slack/whatsapp for any urgent/emergency items
- The executive leaders (Howard & Mikunj) will be available on BST time discussions and the delivery leaders (Ramesh and Venu) will be available 18x7



EDC Time Zone - Overlap Hrs

Time Zones	BST	5:30 AM	6:30 AM	7:30 AM	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:30 PM	1:30 PM	2:30 PM	3:30 PM	4:30 PM
	IST	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Onsite / Offshore Teams	EDC Team only									RLDatix & EDC Team			
Activities	<ul style="list-style-type: none">● Backend Development● Web Frontend Development									<p>Meetings:</p> <ul style="list-style-type: none">● Daily Standup● Sprint planning● Reviews and Demos● Retros● Ad-hoc discussions <p>Blocker Resolutions:</p> <ul style="list-style-type: none">● Technical● Functional● Domain			

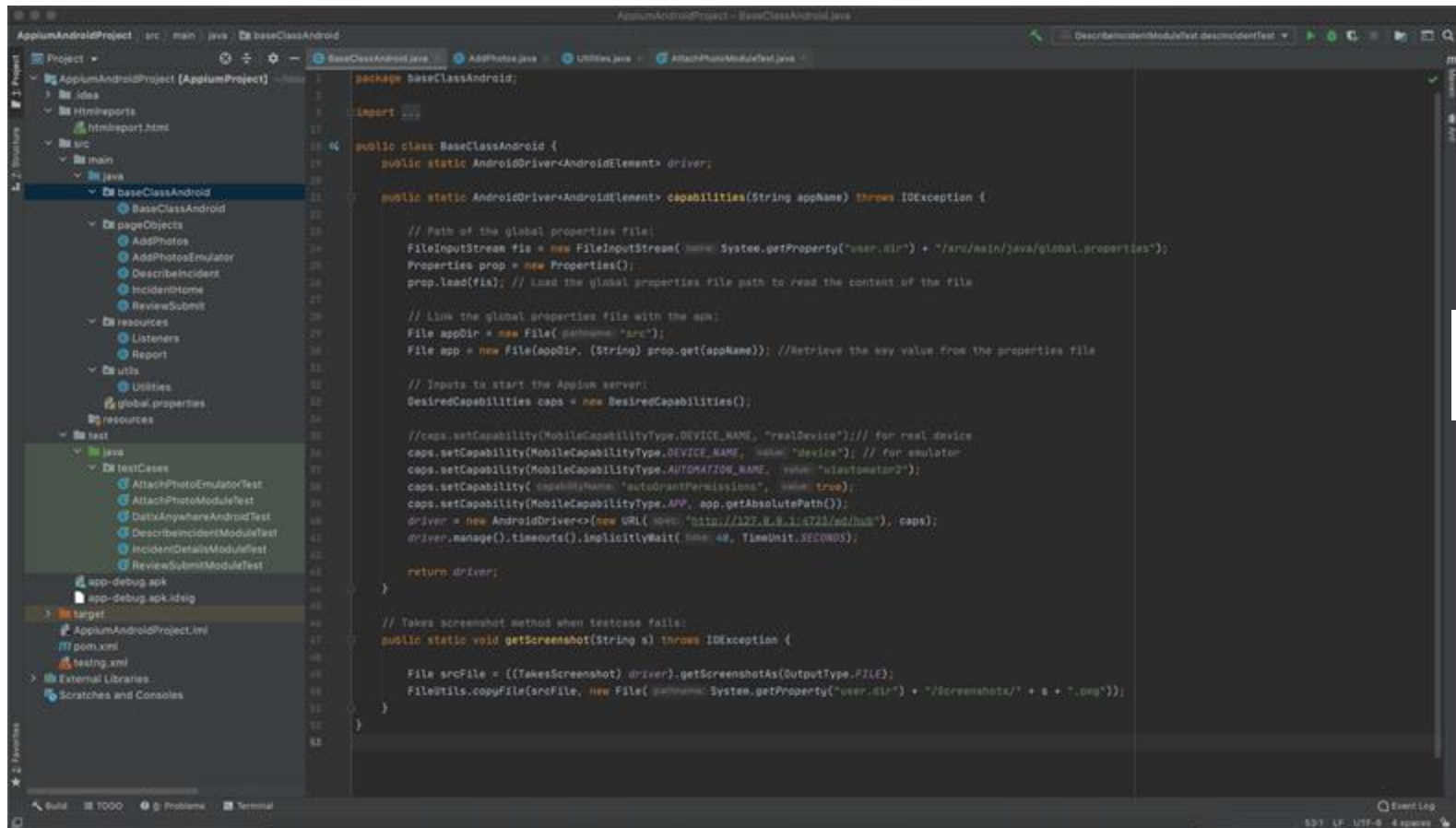


Datix Anywhere - QA Updates

- Analysed current Datix Anywhere Mobile Application
- Drafted Functional Scenarios and Modules - [Link](#)
- Created Test Cases & Plan - [Link](#)
- Created Test Automation Framework for (A) Android (B) iOS using Appium & TestNG
- Created Test Automation Plan - [Link](#)
- Started module wise automation scripts
- Conducted a round of Manual testing and found few defects out of which is one is critical defect (App Crash)



Appium Framework Snapshots - Android



The screenshot displays an IDE window for the 'AppiumAndroidProject - BaseClassAndroid.java' file. The left sidebar shows the project structure, including the 'test' directory with 'TestCases' and 'TestCases.java'. The main editor area shows the 'BaseClassAndroid.java' file, which contains the following code:

```
package baseClassAndroid;

import java.io.*;
import java.util.*;

public class BaseClassAndroid {

    public static AndroidDriver<AndroidElement> driver;

    public static AndroidDriver<AndroidElement> capabilities(String appName) throws IOException {

        // Path of the global properties file:
        FileInputStream fis = new FileInputStream(System.getProperty("user.dir") + "/src/main/java/global.properties");
        Properties prop = new Properties();
        prop.load(fis); // Load the global properties file path to read the content of the file

        // Link the global properties file with the app:
        File appDir = new File(prop.getProperty("src"));
        File app = new File(appDir, (String) prop.get(appName)); //Retrieve the key value from the properties file

        // Inputs to start the Appium server:
        DesiredCapabilities caps = new DesiredCapabilities();

        //caps.setCapability(MobileCapabilityType.DEVICE_NAME, "realDevice");// for real device
        caps.setCapability(MobileCapabilityType.DEVICE_NAME, "device"); // for emulator
        caps.setCapability(MobileCapabilityType.AUTOMATION_NAME, "uiautomator2");
        caps.setCapability("autoGrantPermissions", true);
        caps.setCapability(MobileCapabilityType.APP, app.getAbsolutePath());
        driver = new AndroidDriver<>(new URL("http://127.0.0.1:4722/wd/hub"), caps);
        driver.manage().timeouts().implicitlyWait(40, TimeUnit.SECONDS);

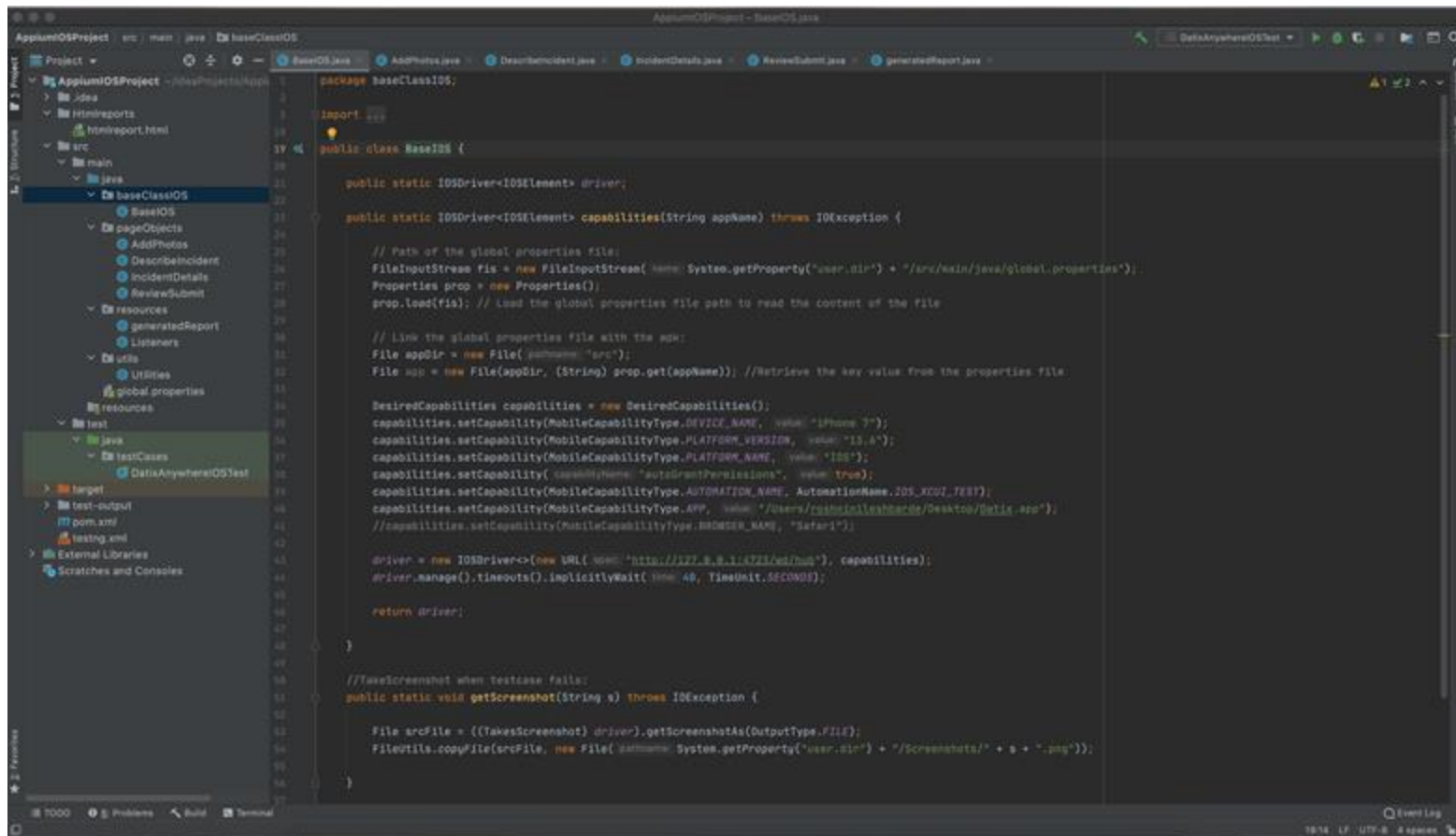
        return driver;
    }

    // Takes screenshot method when testcase fails:
    public static void getScreenshot(String s) throws IOException {

        File srcFile = ((TakesScreenshot) driver).getScreenshotAs(OutputType.FILE);
        FileUtils.copyFile(srcFile, new File(prop.getProperty("user.dir") + "/Screenshots/" + s + ".png"));
    }
}
```



Appium Framework Snapshot - iOS



The screenshot displays an IDE window titled 'AppiumiOSProject - BaseIOS.java'. The left sidebar shows a project structure with folders like 'src', 'main', 'resources', and 'test'. The main editor area shows the 'BaseIOS.java' file with the following code:

```
package BaseClassIOS;

import java.io.*;
import org.openqa.selenium.*;
import org.openqa.selenium.remote.*;
import org.openqa.selenium.support.*;
import org.openqa.selenium.support.ui.*;

public class BaseIOS {

    public static IOSDriver<IOSElement> driver;

    public static IOSDriver<IOSElement> capabilities(String appName) throws IOException {

        // Path of the global properties file:
        FileInputStream fis = new FileInputStream( home: System.getProperty("user.dir") + "/src/main/java/global.properties");
        Properties prop = new Properties();
        prop.load(fis); // Load the global properties file path to read the content of the file

        // Link the global properties file with the app:
        File appDir = new File( appName: "src");
        File app = new File(appDir, (String) prop.get(appName)); //Retrieve the key value from the properties file

        DesiredCapabilities capabilities = new DesiredCapabilities();
        capabilities.setCapability(MobileCapabilityType.DEVICE_NAME, value: "iPhone 7");
        capabilities.setCapability(MobileCapabilityType.PLATFORM_VERSION, value: "11.0");
        capabilities.setCapability(MobileCapabilityType.PLATFORM_NAME, value: "iOS");
        capabilities.setCapability( capabilitiesName: "autoGrantPermissions", value: true);
        capabilities.setCapability(MobileCapabilityType.AUTOMATION_NAME, AutomationName.IOS_XCUI_TEST);
        capabilities.setCapability(MobileCapabilityType.APP, value: "/Users/rashidmishra/Desktop/Getis.app");
        //capabilities.setCapability(MobileCapabilityType.BROWSER_NAME, "Safari");

        driver = new IOSDriver<>(new URL( home: "http://127.0.0.1:4743/wd/hub"), capabilities);
        driver.manage().timeouts().implicitlyWait( time: 40, TimeUnit.SECONDS);

        return driver;
    }

    //TakeScreenshot when test case fails:
    public static void getScreenshot(String s) throws IOException {

        File srcFile = ((TakesScreenshot) driver).getScreenshotAs(OutputType.FILE);
        FileUtils.copyFile(srcFile, new File( appName: System.getProperty("user.dir") + "/screenshots/" + s + ".png"));
    }
}
```



Thank you!

