Patrick Powell

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Profile

I have a passion for software craftsmanship and take pride in writing meaningful code. SOLID principles and design patterns play a key role in my approach to developing clean and maintainable implementations. I find it important to share knowledge amongst a team by pair programming and conducting larger scale workshops within the team. I am a team player who thrives working within a collaborative environment but I am also confident in my ability to provide technical direction when called upon. I am currently looking for a role in a team that needs a strong developer, who will help them thrive and produce a product without compromising on quality or user experience.

Relevant Experience

- Strong problem solver and solution designer.
- Deep understanding of Android SDK using Java and Kotlin.
- Strong advocate for best practises such as Robert Martin's clean code, clean architecture and SOLID principles.
- Firm grasp of mobile security concepts, common vulnerabilities and the methods used to prevent the tampering and reverse engineering of applications in a production environment.
- Proficient in testing frameworks such as JUnit, Mockito and Espresso.
- Proficient using CI platforms such as Jenkins to create complex build pipelines.
- Proficient implementing Android Applications using modern mobile trends such as MVVM, MVP, Android Architecture components and modularisation.
- Deep understanding of the Gradle build system and the implementation of Gradle plugins.
- Integration of static code analysis tools such as Checkstyle, PMD and Sonar.

Employment History

Senior/Lead Android Engineer at Barclays Mobile Banking

July 2018 to Present

Android Engineer at Barclays Mobile Banking

May 2017 to July 2018

- Leading the development of new features and reimplementation of large sections of technical debt in agile scrum teams working to bi-monthly sprints utilising physical kanban boards and Jira to effectively manage the production of deliverables.
- Spiking modern Android and mobile development trends such as Kotlin, clean architecture, modularisation and design patterns such as MVP, MVVM and managing the wide spread adoption amongst a team of around 60 developers based in Manchester, Knutsford, Northampton and Pune.
- Harnessing the power of CI/CD processes such as static code analysis and pipeline by code in order to enforce best practises and improve the overall quality of the codebase.
- Managing the build jobs and build servers for the mobile teams as well as being a mobile DevOps champion within the wider organisation.

- Stressing the importance of consistent code and (valuable) unit testing to other members of the team, I have produced a coding guide and standards document for use during development and code review.
- Implementation of new and modification of existing mechanisms to impede efforts to reverse engineer our application such as certificate pinning, on-device and transport based encryption using the native keystore, binary integrity checks and signature verification as well as a number of bespoke obfuscation techniques.
- Designed and developed a number of core framework components such as a secure networking library reminiscent of retrofit.
- Implemented a static code analysis tool called AlfredCI that runs on our Jenkins server at the point code is checked in and highlights violations on our source control solution.
- Lead the development of a "Barclays Design Language" UI component library that has been used across the application.

Mobile Developer at wejo Ltd.

July 2016 to May 2017

- I played a key role in developing a journey tracking SDK to be consumed by third-parties.
- Greenfield development of a number of wejo applications for iOS and Android for OEMs and insurers such as Direct Line, First Direct and Mitsubishi.
- Integrating Android Auto OEM APIs to ingress sensory data into wejo's big data platform using a mobile application
- Automation of build pipelines with the use of custom Gradle scripts and integration of DevOps tools such as Jenkins and Nexus.
- Spiking new technologies for the real-time ingress of data using a variety of bi-directional protocols such as WebSockets and MQTT.
- Working within an agile scrum team in order to produce a high quality product to a strict delivery schedule.

Software Developer at Footsqueek Ltd.

April 2015 to July 2016

- Android Development - single handedly delivered around 6 applications.
- Working directly with clients to help achieve their goal for each application, explain technical details and help mould the user experience of an application.
- Web development – .NET APIs, HTML5, CSS, JSON & JavaScript.
- Managing the release cycle of applications on behalf of clients, using the Google Play Console.

Education

BSc (First-Class Honours) Computer Science at University of Chester

2013 to 2016

Computing, Physics & Acting at Aquinas College, Stockport

2011 to 2013

10 GCSEs Grade (A – C) at Poynton High School, Cheshire (2006 – 2011)

2006 to 2011