Tuesday, March 21, 2017

10:30AM, LL 21 C
Developer on the Rise – Part 1: Blurring the line between Developer and Data Scientist with PixieDust
David Taieb, Cloud Data Services Developer Advocacy, @DTAIEB55
Robert Dickerson, Software Developer, IBM-Swift, @rfdickerson
Animesh Singh, STSM - IBM Cloud Platform, @AnimeshSingh

Ready to dip your toe into data science? Yes? But where and how do you start? Well we have an answer – Notebooks and PixieDust! PixieDust is a new open source library that helps data scientists and developers working in Jupyter Notebooks and Apache Spark be more efficient. PixieDust speeds data manipulation and display with features like auto-visualization of Spark DataFrames , realtime Spark Job progress monitoring directly from the Notebook, seamless integration to cloud services and automated local install of Python and Scala kernels running with Spark. And if you prefer working with a Scala Notebook - no problem! PixieDust can also run on a Scala Kernel - imagine being able to visualize your favorite Python chart engines from a Scala Notebook!
Join us for this workshop and learn how you can use this tool in your own projects to visualize and explore data effortlessly with no coding. As a bonus we'll finish with a demo combining Twitter, Watson Tone Analyzer, Spark Streaming, and some fun real-time visualizations-all running within a Notebook.

11:30AM, LL 21 C
Developer on the Rise – Part 2: Being serverless and Swift... Is that allowed?
David Taieb, Cloud Data Services Developer Advocacy, @DTAIEB55
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Of course its allowed - just matters how you do it. In this part of the workshop we'll start with serverless: New cloud programming models enabled by serverless architectures are emerging, allowing developers to focus more sharply on creating their applications and less on managing their infrastructure. The OpenWhisk project started by IBM and now part of Apache provides an open source platform to enable these cloud native, event-driven applications. In this talk, we will provide an overview of serverless architectures, introduce the OpenWhisk programming model, and then show how to deploy an OpenWhisk application on IBM Bluemix OpenWhisk.

Then we'll get Swift! It's not only a language you turn to to build your iOS application, but it can also be the language you can use to build your backend. This part of the workshop will use a text-based adventure game called "GameOn" as an example for building a Server-side Swift App.

Topics include:

• How to create a web service using the IBM Kitura web framework • How to integrate the Watson SDK for Swift into your application • How to dockerize your Swift application and deploy it to Bluemix

2:00 PM, LL 21 C
Lean and Easy IoT Applications with OSGi and Eclipse Concierge
Jan Rellemeyer, Research Staff Member, IBM Research, @rellermeyer

Modularization of software is key to handling the inherent complexity of distributed applications like for the Internet of Things (IoT) and provide a flexible environment to evolve applications and manage their deployment effectively. OSGi is a popular framework for dynamic modules for the Java language. Eclipse Concierge provides a clean, small and lightweight implementation of the OSGi core framework specification, specifically tailored to embedded systems and IoT.

In this talk, we will cover how to use and deploy the Concierge OSGi framework, demonstrate its advantages based on benchmarks and use cases, and discuss many of the new and upcoming features in the Concierge project such as the OSGi REST interface and Cloud Ecosystems reference implementations.

4:30 PM, Grand Ballroom 220B
Ten Simple Rules for Writing Great Testcases
Steve Poole, Developer Advocate, Runtime Technologies, IBM, @spoole167 and Stuart Marks, Technical Staff, Java Platform Group, Oracle

We've all been there: debugging problems in a test case and silently screaming into the dark. (Sometimes not even silently.) Poor test case design can cost you significant time and effort let alone impact the quality of your application or product. Testing is vitally important, but so is having a test suite you can use effectively and can rely on. This session will take you through the top ten rules for writing effective and reliable testcases.

The new kids on the block such as Cloud or Docker and general "Infrastructure as Code" style solutions may make you believe old rules are just old. This talk will make you think again. Knowledge gained from personal experience is always best. Learn from these old masters how to design great test cases and maybe you'll never have to visit the dark side again.

8:30 PM, LL 21 A
Node.js – ask us anything!
Sam Roberts, Team Lead, StrongLoop and API Connect, IBM @octetcloud and Michael Dawson, Software Developer, IBM @mhdawson1

You'll have some captive Node.js/V8 collaborators, and you can ask them anything! Confused about the LTS plans, wondering what is happening in the Node workgroups, want to know what is really going to happen with Webworkers, what's the future of Promises in Node.js? Wondering how to debug your production failures? Ask us anything, and we'll try and answer!