

JAVA CLIENTS AND JAVAFX

THE DEFINITIVE GUIDE

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 @steveonjava



HOW I PICTURED MYSELF DURING THE APOCOLYPSE



HOW I ACTUALLY LOOK DURING THE PANDEMIC



HISTORY OF JAVA FX

2006: F3	Form Follows Function	Welcome to F3
2008: JavaFX 1.0	Initial Release of JavaFX	
2011: JavaFX 2.0	Java API (JavaFX Script Removed)	
2012: JavaFX 2.2	JavaFX Bundled with JavaSE 7u6	
2014: JavaFX 8	JDK Integration	
2018: JDK 11	JavaFX Removed from the JDK	





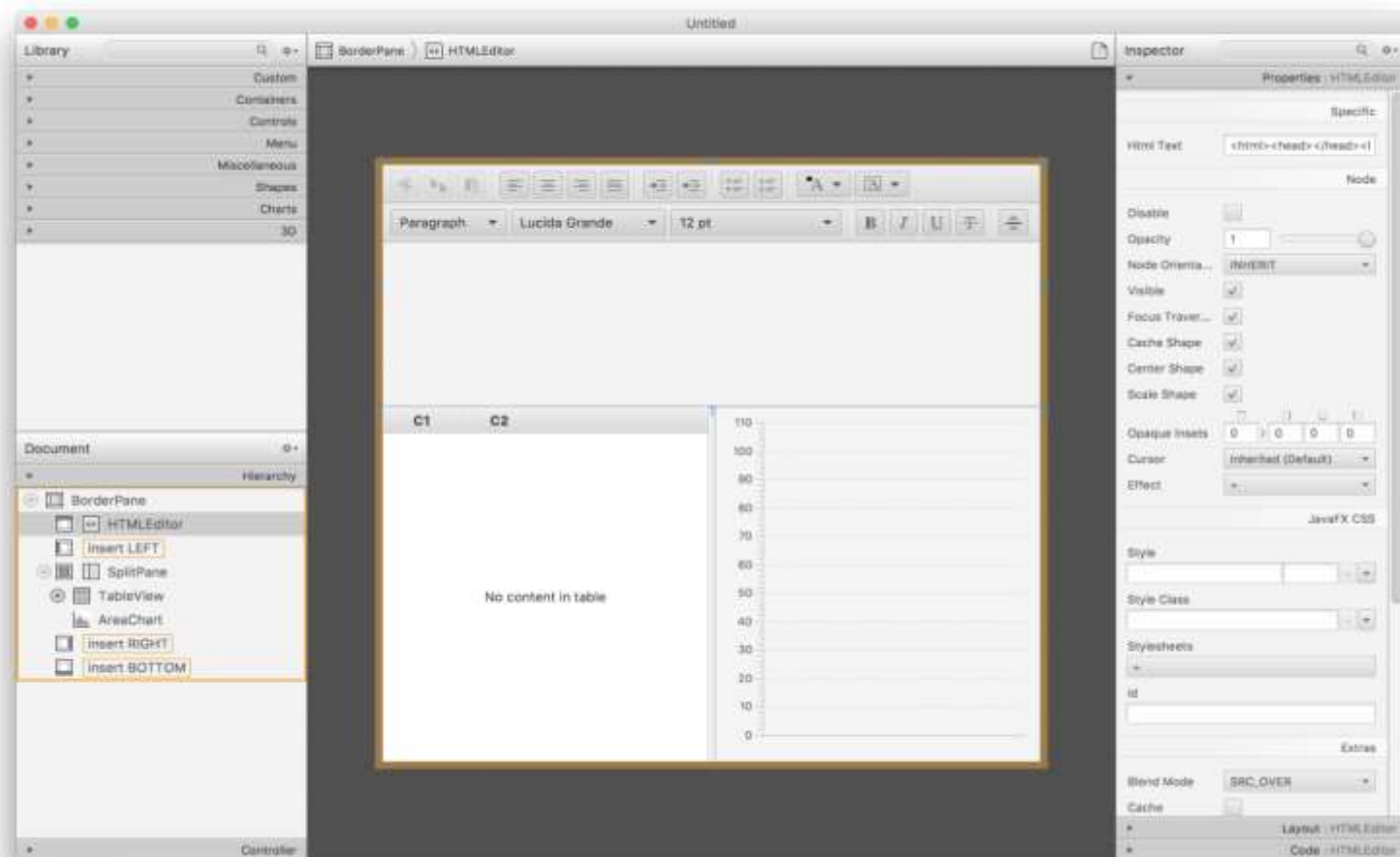
GLUON MOBILE

- JavaFX 11, 12, 13, and 14 builds
- SceneBuilder GUI Builder
- JavaFX on iOS and Android



[Home](#) » [Gluon Labs](#) » Scene Builder

Scene Builder



Drag & Drop,
Rapid Application
Development.

[Download Now](#)

JAVAFX USE CASES

MINT TRAINING AND RESOURCE MANAGEMENT

MINT WebAssistant v10.1.2.20

ADMINISTRATOR

W 48, Sonntag 30.November.14

W 49, Sonntag 7.Dezember.14

Organizations and Customers: 'MINT Samp...'

- MINT Sample Organisation
 - Flight Deck Crew and Training
 - Cabin Crew and Training
 - Maintenance Training Organisation (EASA Part-145)
 - Maintenance Organisation (EASA Part-145)
 - Production Organisation (EASA Part 21 Subpart G)
 - Air Traffic Controller Training
 - Flight School
 - Helicopter Training

Record Items and Requirements: no selection

- Flight Deck Crew (FD)
 - Flight Deck Crew Instructor Qualifications
 - Flight Deck Crew Qualifications
 - Flight Deck Crew Training Records and FORMS
 - Flight Deck Crew Room and Equipment Qualifications
 - Flight Deck Roles and Responsibilities
- Requirements

Categories: no selection

- Products and Tasks
 - Trainings and Products
 - Flight Deck Crew (FD)
 - Cabin Crew (CC)
 - Cabin Crew Initial Course (all fleets)
 - Cabin Crew SEP Recurrent Course
 - Cabin Crew JC BusClass Promotion Course
 - Cabin Crew FC FirstClass Promotion Course
 - Cabin Crew Purser Course
 - Cabin Crew Senior Purser Course
 - Maintenance Training Organisation (EASA Part-145)
 - Maintenance Organisation (EASA Part-145)

Status	Photo	Name	Location	Organisation	R
178		Davinci	Hamburg	Flight School T...	HR
179		Boyer	Frankfurt	FG 02	HR
180		Cruce	Miami	Helicopter Crew	HR
181		Lichten...	Miami	Helicopter Crew	HR
182		Frostad	Miami	Helicopter Crew	HR
183		Hewlett	Miami	Cabin Crew N...	HR
184		Alvarez	Singapore	Flight Deck Cr...	HR
185		Elgar	Miami	Cabin Crew	HR
186		Duerr	Frankfurt	WG 08	HR
187		Elwell	Miami	Helicopter Trai...	HR
188		Starkey	Miami	Flight Deck Cr...	HR
189		Hemm...	Hamburg	Flight School T...	HR
190		Silk	Miami	Helicopter Crew	HR
191		Botnick	Miami	Cabin Crew	HR
192		Garcia	Miami	Helicopter Crew	HR
193		Farleigh	Miami	Helicopter Trai...	HR
194		Rivera	Miami	Cabin Crew	HR

Rows: 259

Published schedule

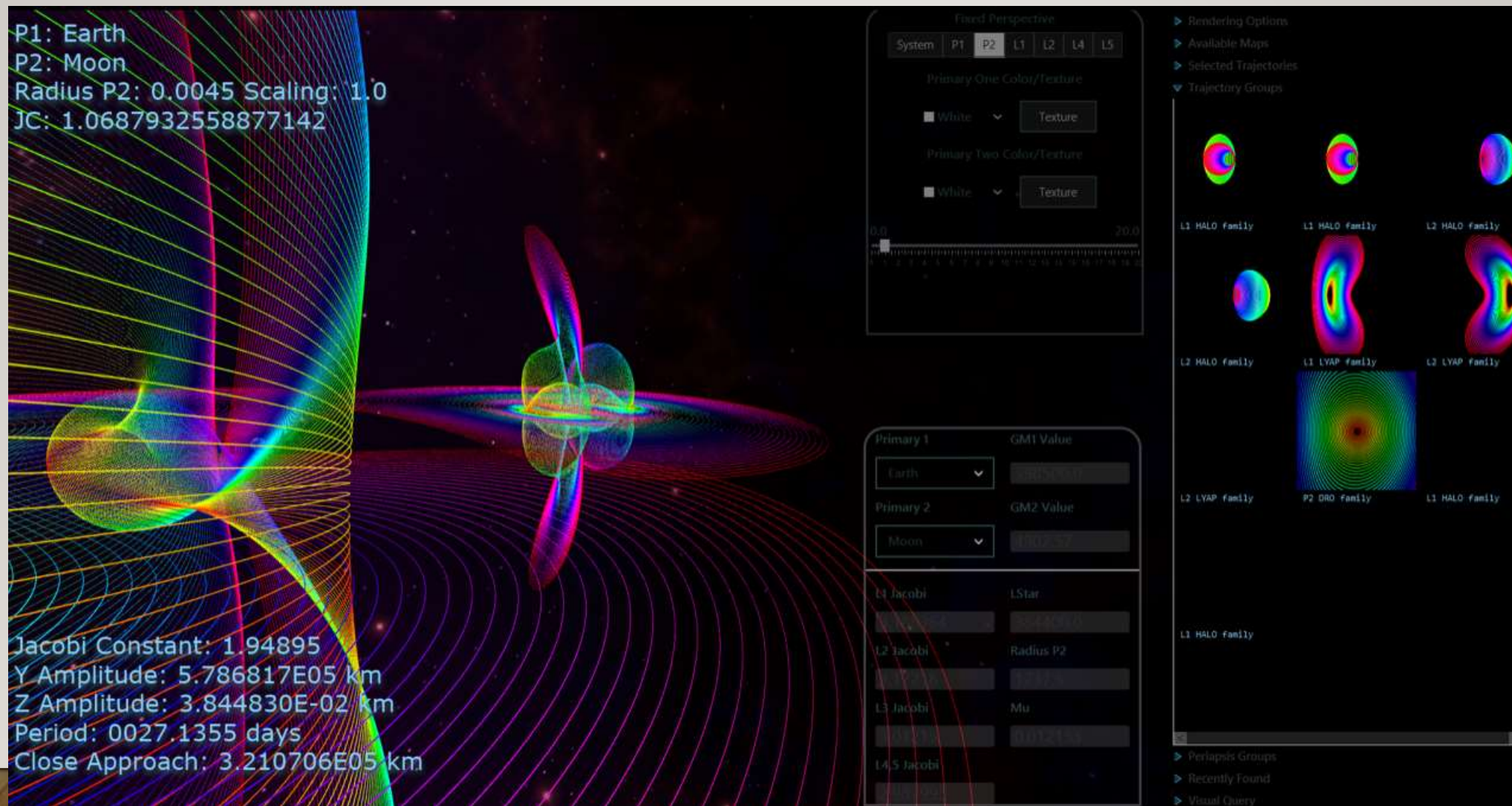
S-76 Initial7

S92 Initial7

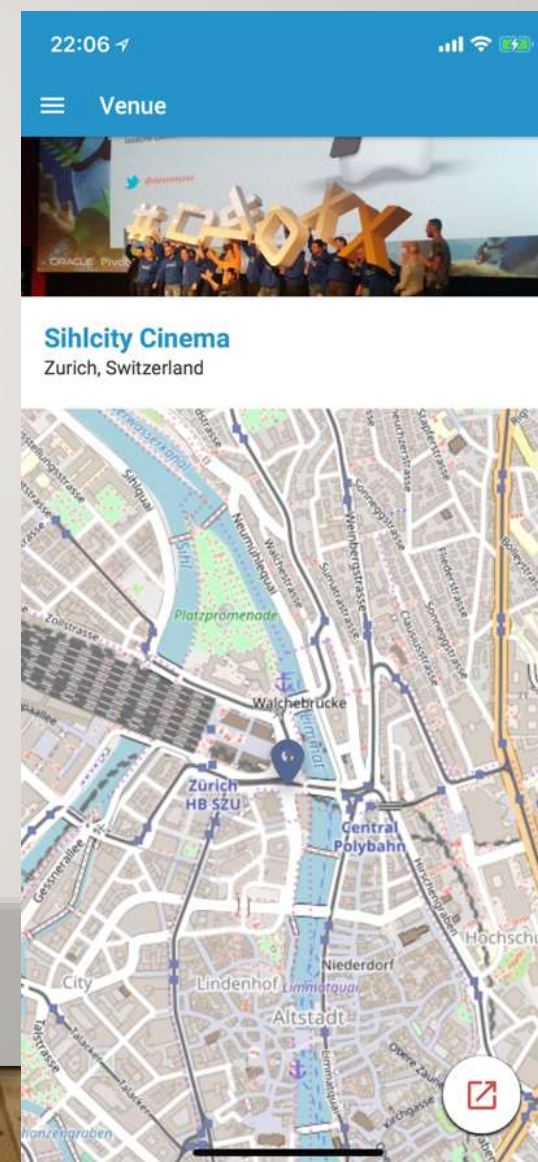
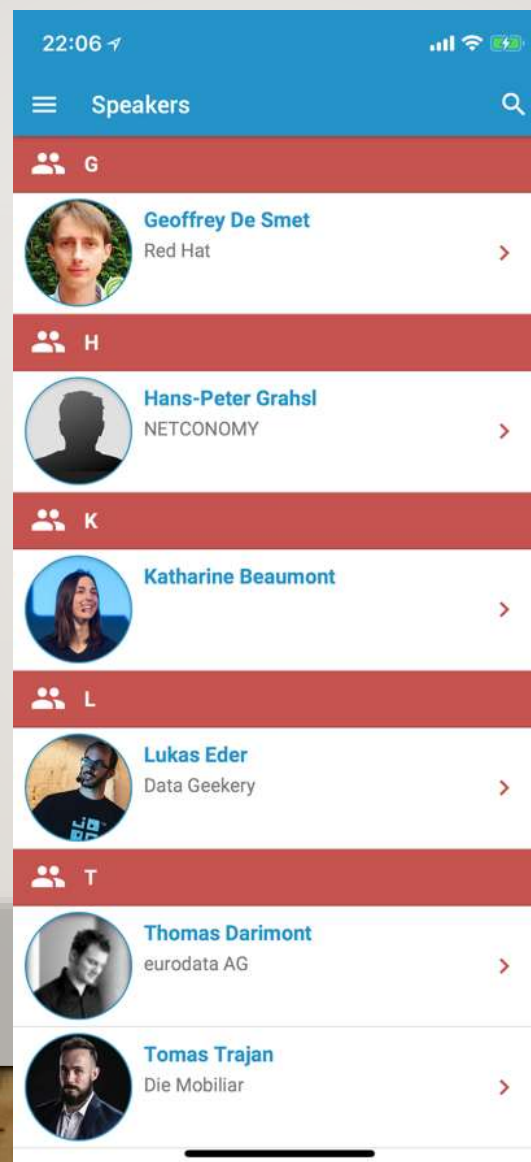
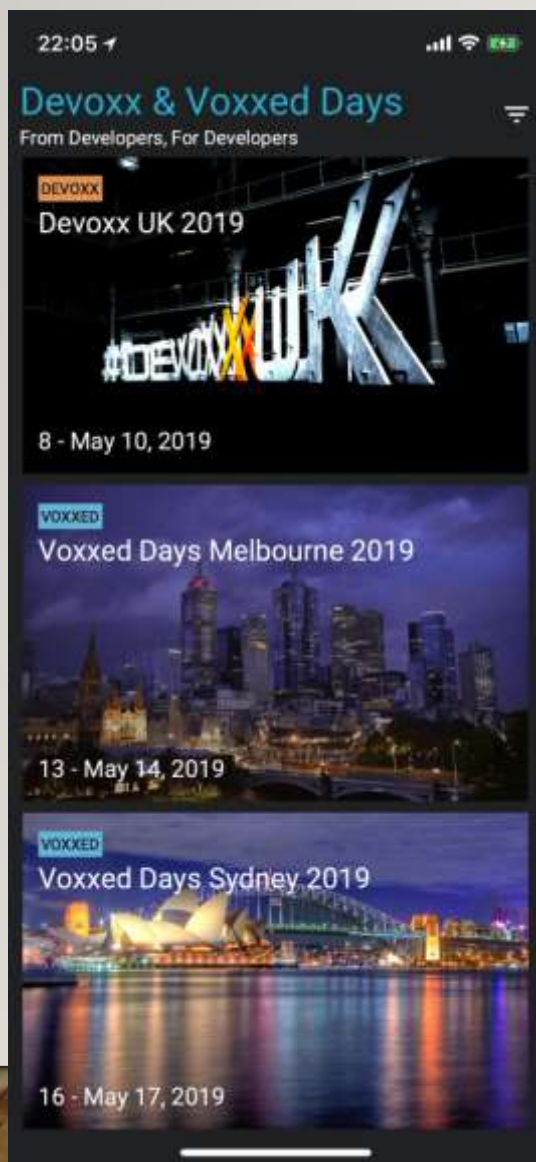
Bell 412 New Hires7

Rows: 181

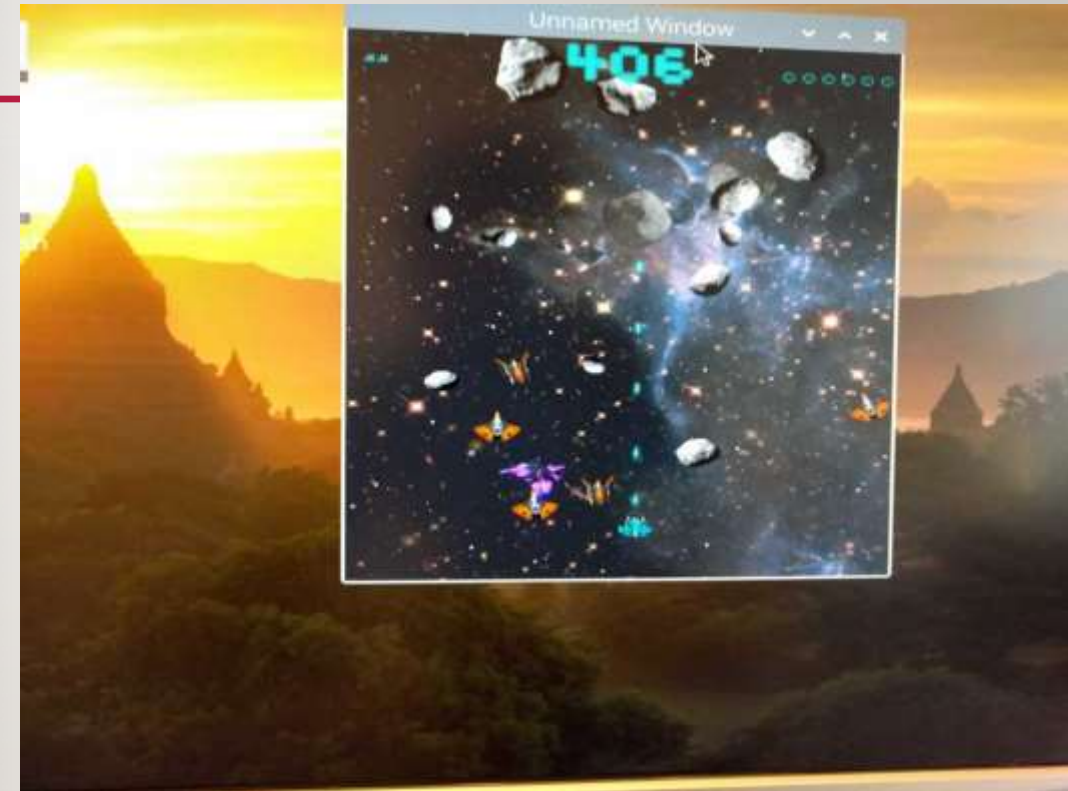
NASA DEEP SPACE TRAJECTORY EXPLORER



DEVOXX CONFERENCE MOBILE APPLICATION



SPACEFX GAME

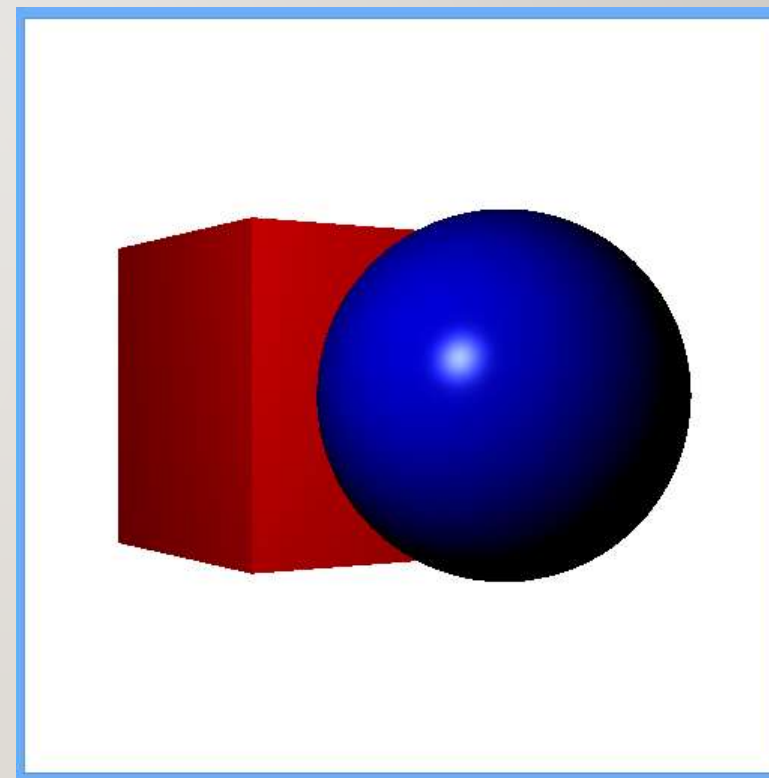


A 3D rendered scene of a port. In the foreground, a red semi-truck is parked on a light-colored ground. The truck has a red cab and a long black trailer. In the background, there are several large metal cranes and stacks of shipping containers in various colors (green, blue, white). The sky is overcast and grey. The text "JAVA FX 3D" is overlaid in the center of the image, with a vertical white line to its left.

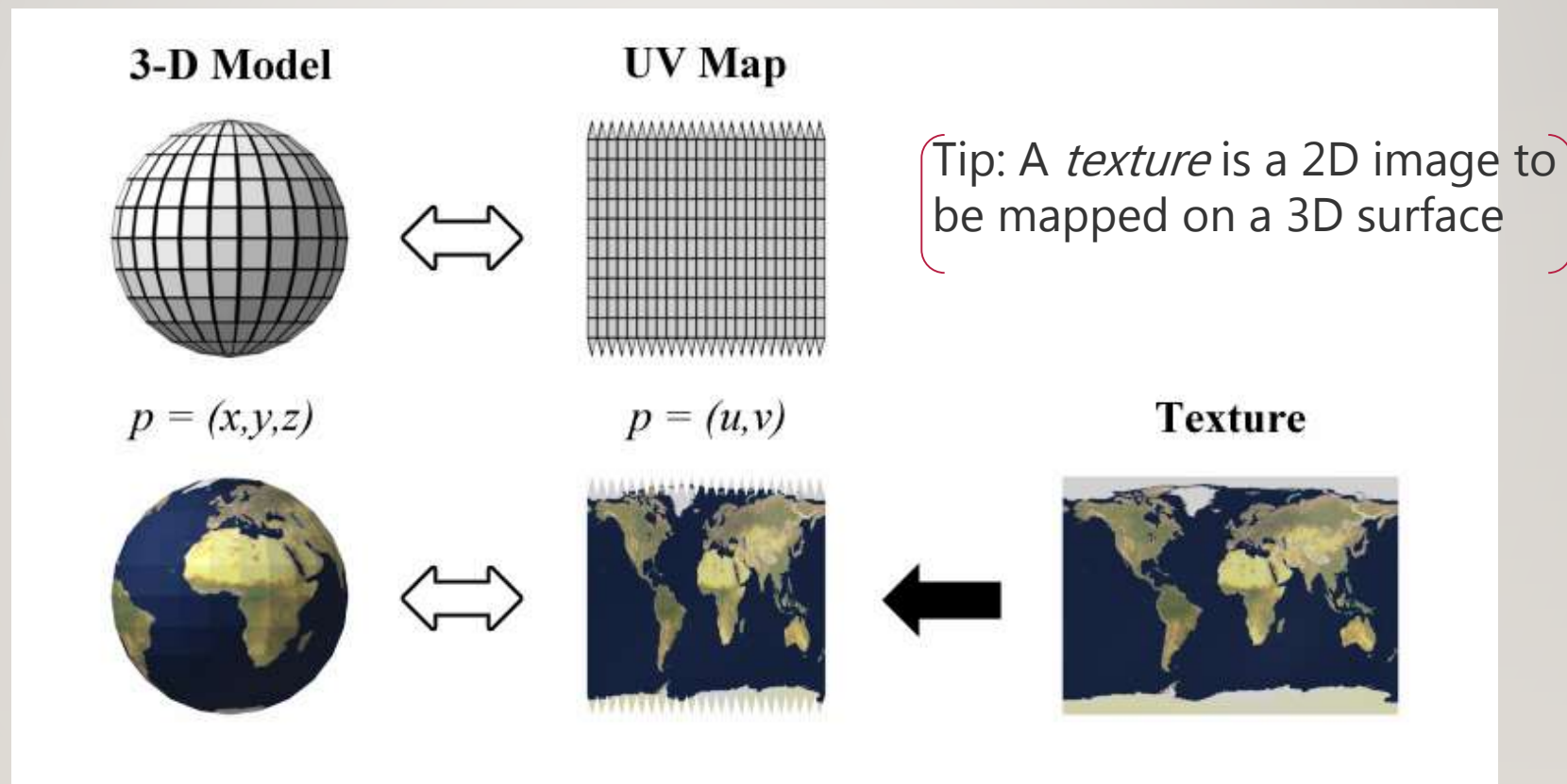
JAVA FX 3D

MESH GEOMETRY (3D SHAPES)

- Predefined shapes
 - Box
 - Cylinder
 - Sphere
- User-defined shapes
 - Using **TriangleMesh** / **MeshView**

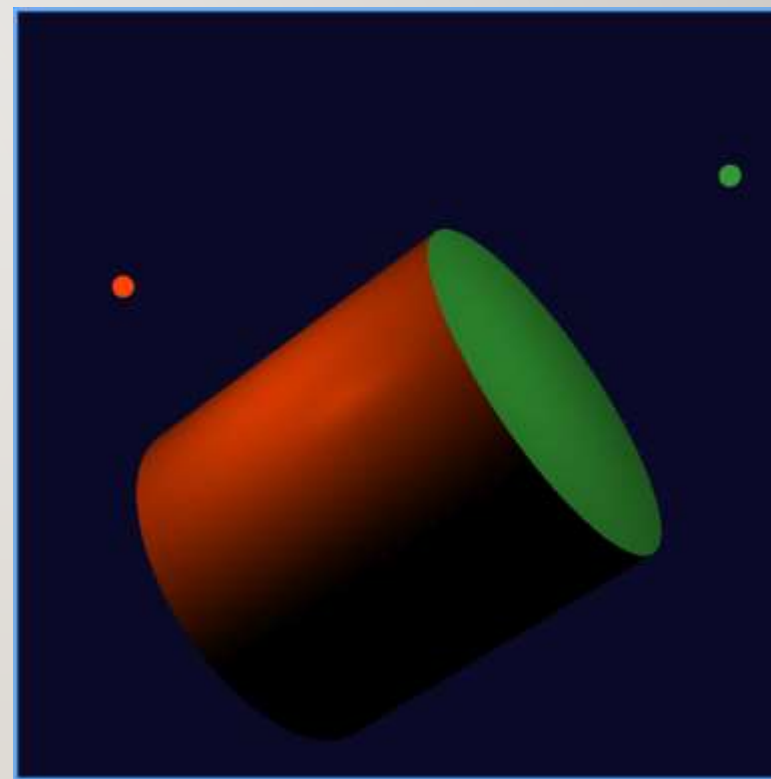


UV MAPPING TEXTURES TO SHAPES



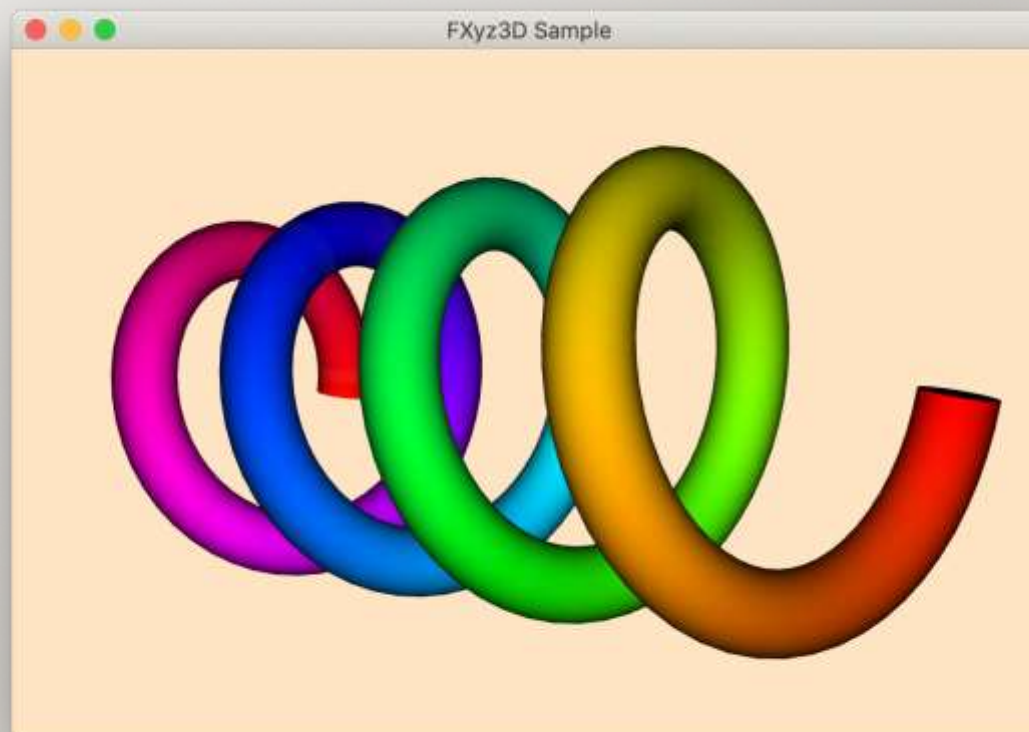
3D LIGHTS

- Lights are nodes in the scene graph
 - `PointLight`
 - `AmbientLight`
- Default light provided if no active lights

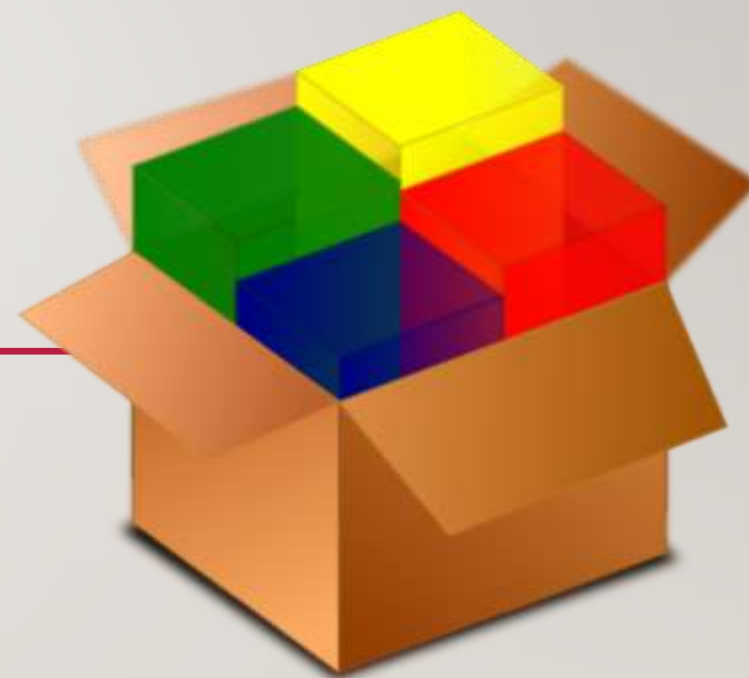


FXYZ

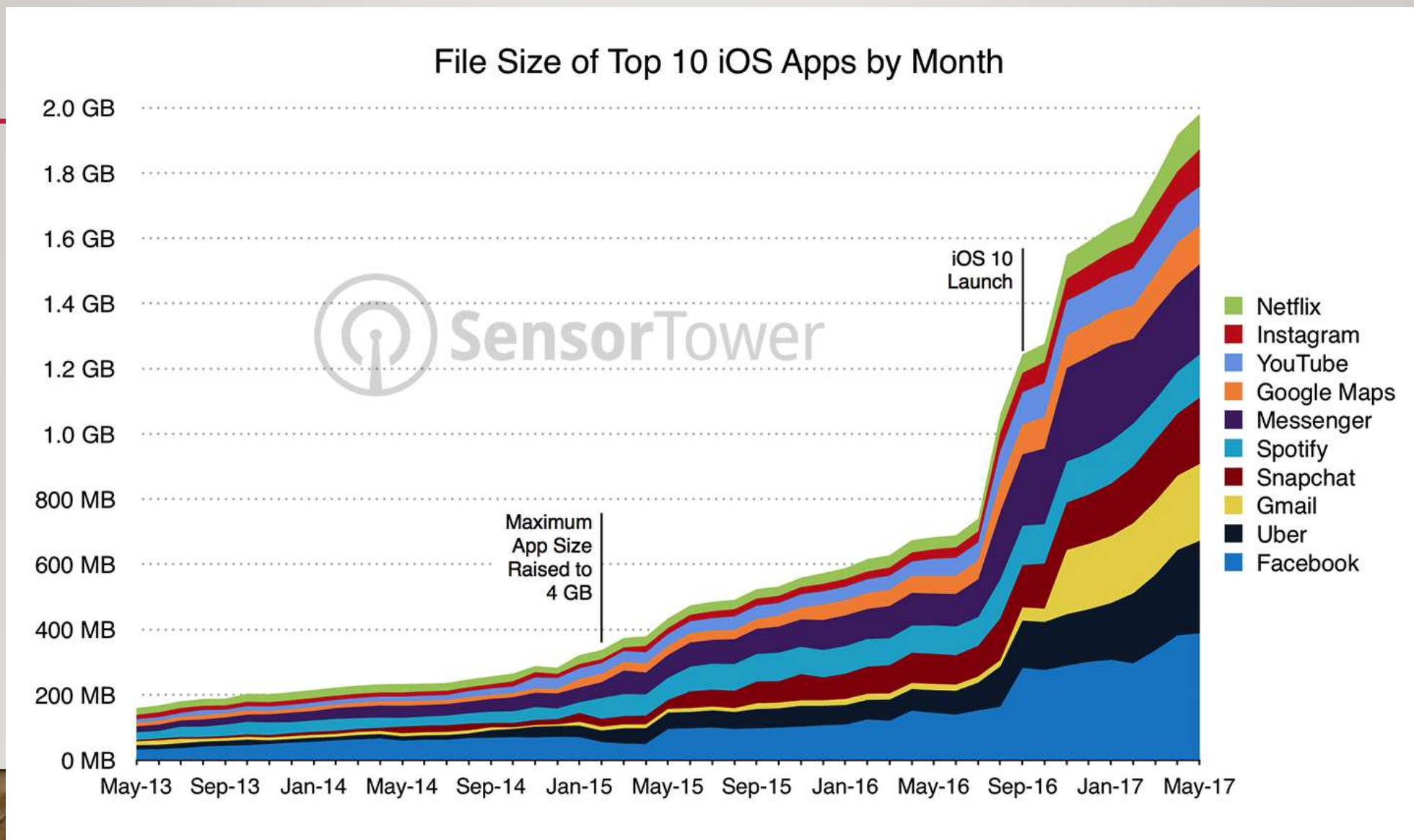
- Built-in shapes
- Lights, materials, camera
- FXyz 3D <https://github.com/FXyz/FXyz>



1. PACKAGE YOUR PLATFORM



PACKAGES KEEP GETTING LARGER

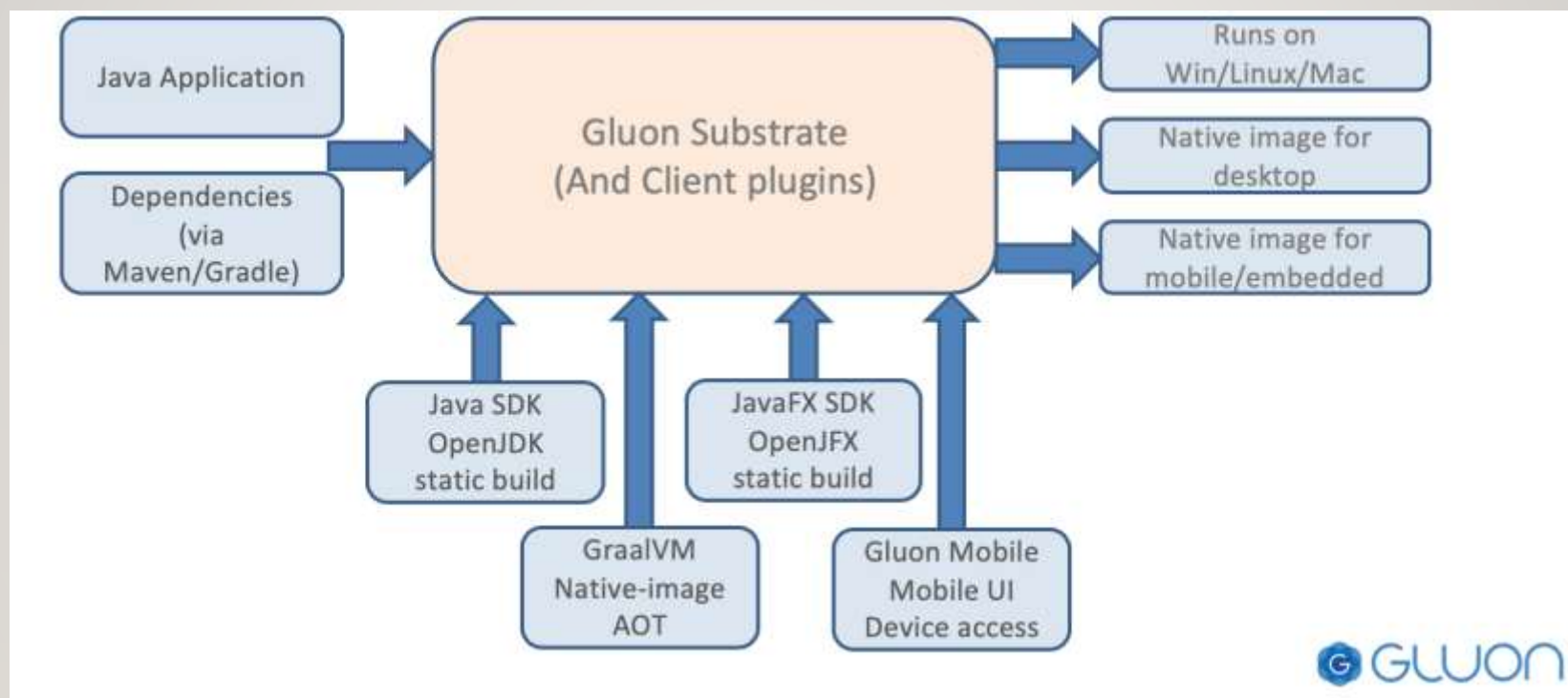


PACKAGING JAVAFX APPLICATIONS

- Works, but not recommended:
 - “FAT JAR” – Package all your dependencies and run on command line
- Recommended:
 - jlink – Requires modular apps
 - jpackage – Available **now** in Java 14
- New options:
 - Native image – Use Graal to create a native application
 - OpenWebStart – Open source version of Web Start for modern JDKs by Karakun



CREATE STATIC IMAGES



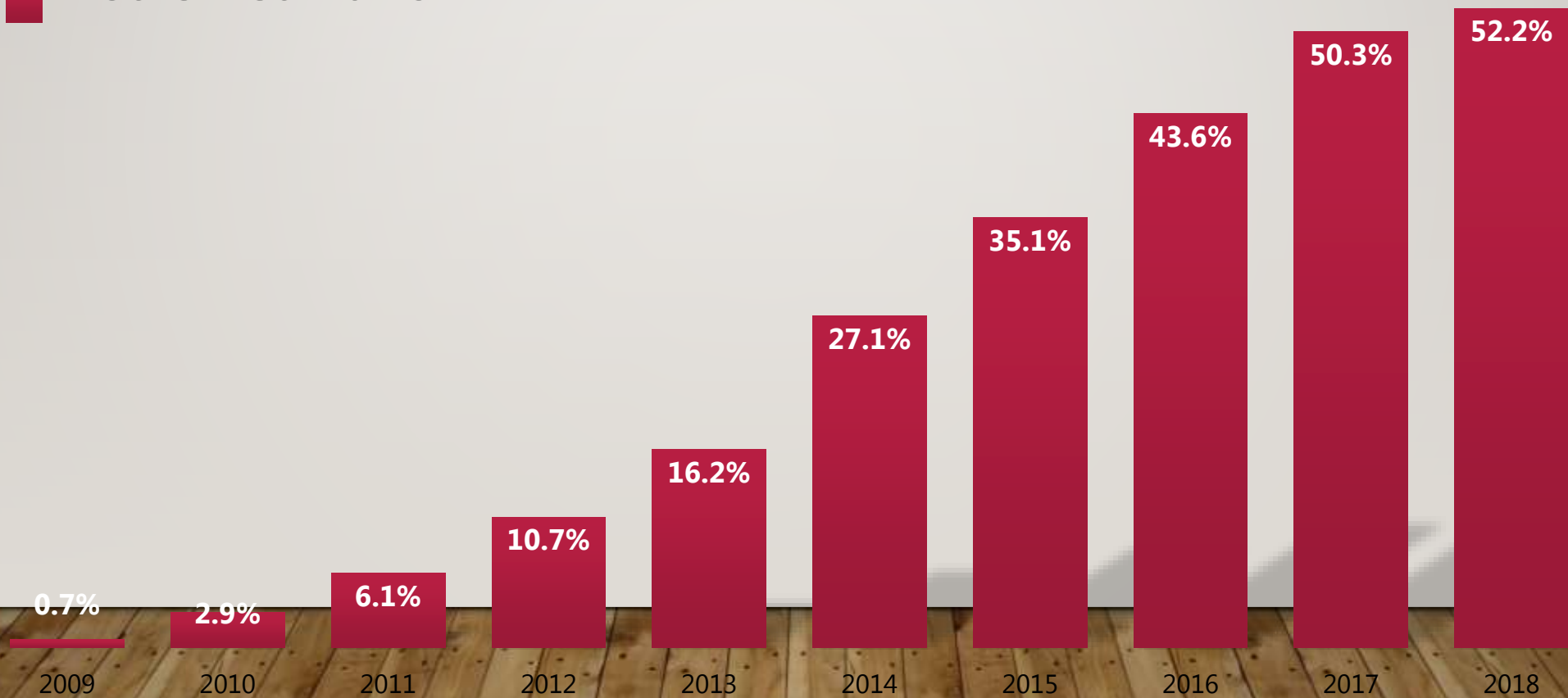
<https://www.gluonhq.com>

2. TARGET MOBILE FIRST



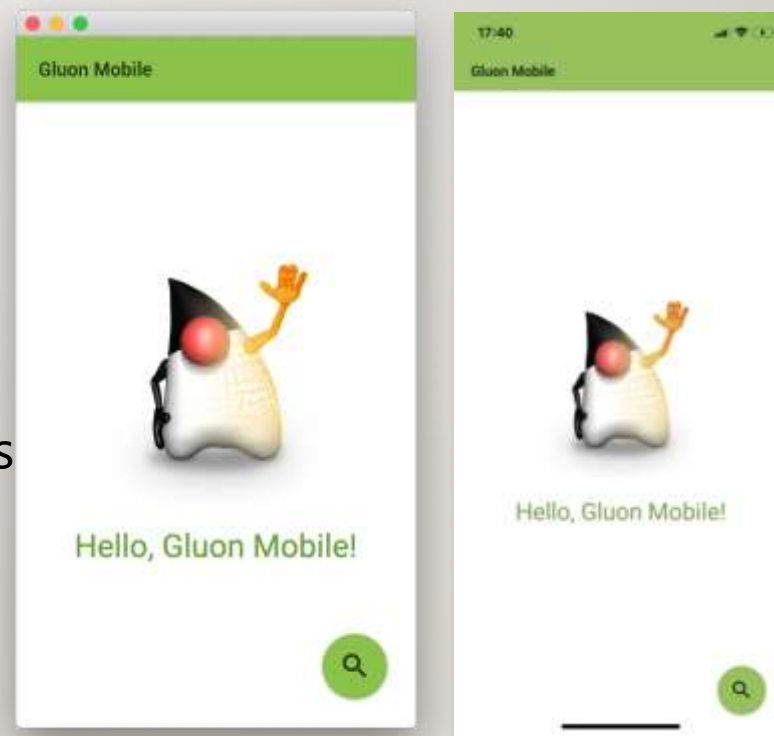
MOBILE WEB TRAFFIC

 Mobile Web Traffic

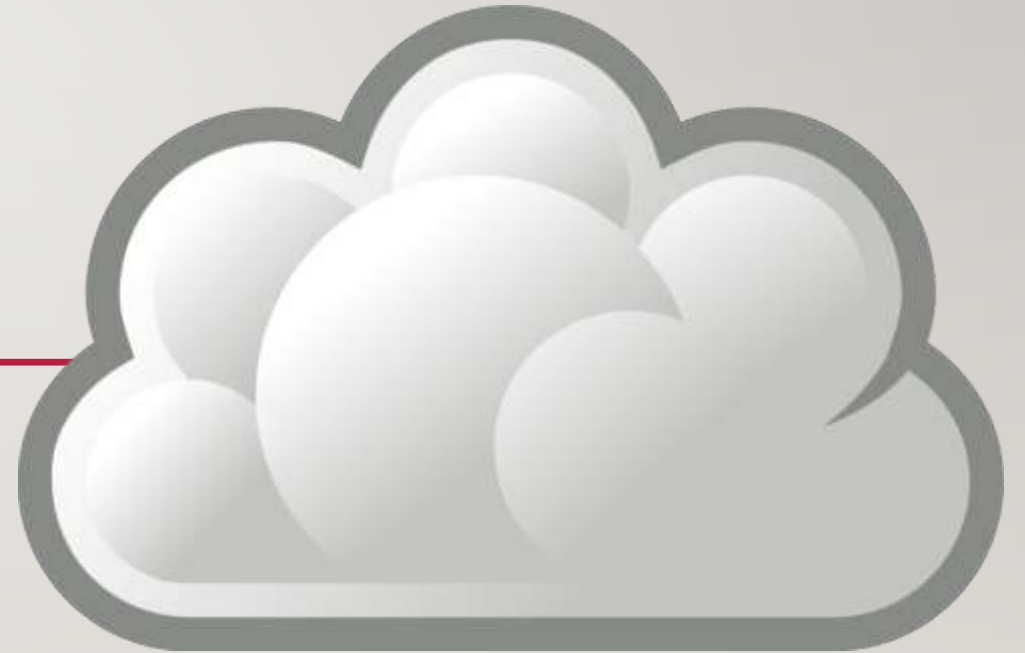


JAVAFX ON MOBILE

- Native-image from GraalVM
- OpenJDK 11+ & OpenJFX 11+
- Mac OS X, Linux, iOS, Android
- Gradle/Maven plugins
- IDE Support for IntelliJ, Eclipse, and NetBeans
- <https://github.com/gluonhq/client-samples>



3. BUILD FOR THE CLOUD



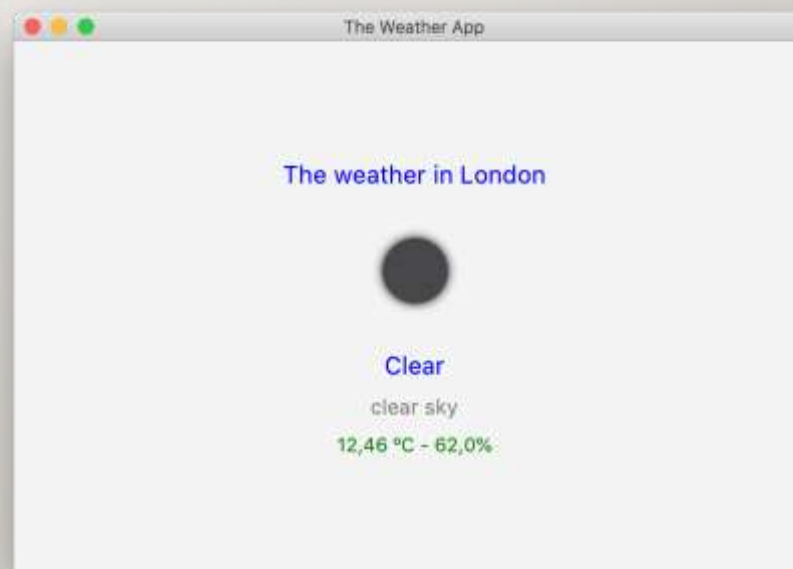
ETEOBOARD



JAVAFX ON THE CLOUD

- The Weather App
- Don't reveal your credentials!

```
RemoteFunctionObject functionObject =  
RemoteFunctionBuilder.create("weather")  
    .param("q", CITY)  
    .object();
```



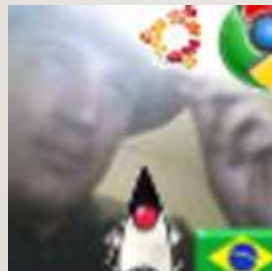
JFROG FREE SUBSCRIPTION

YOUR FREE SUBSCRIPTION INCLUDES

 JFrog Artifactory  JFrog Xray  JFrog Pipelines

<https://jfrog.com/artifactory/start-free/>

FROM JAVAFX EXPERTS TO THE COMMUNITY



Q&A