

**I'm from**  
**QBRANCH:CODE**  
**and SweGUG**

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# Groovy on Google AppEngine

The good, the bad and the ugly...

# Google AppEngine

- “Freemium” cloud service
- Java & Python supported

# GAE Services

- User
- Mail
- URLFetcher
- Cache
- BigTable
- Image manipulation

# The Java side

- Limited JVM
  - No awt
  - No threads
  - No sockets
- No writing to filesystem
- App might have to load on request

# Groovy

- Dynamic language running on the JVM
- Easy to learn for Java devs
  - Almost all valid Java code IS valid Groovy code
- Embeddable

# Groovy Highlights

- Properties
- Closures
- Meta Object Protocol
- Grape
  - Easily getting dependencies
  - `@Grab` annotation

# Groovy on GAE

- Supported from day one
- Grails
- Gaelyk



# Grails on GAE

- Grails 1.1.1 must be used
- Plugins
  - AppEngine
  - GORM-JPA
    - Undocumented
- A bit to heavy-weight

# Gaelyk

- Small framework for Groovy+GAE
- Groovlets
- Groovy template servlet
- Wrappers around the services
- Small footprint
- Created by
  - Guillaume Laforge (Groovy Project Lead)
  - Marcel Overdijk

# Gaelyk wrappers

- datastore : the Datastore service
- memcache : the Memcache service
- urlFetch : the URL Fetch service
- mail : the Mail service
- images : the Images service
- users : the User service
- user : the currently logged in user (null if no user logged in)
- defaultQueue : the default queue
- queues : a map-like object with which you can access the configured queues
- xmpp : the Jabber/XMPP service.
- localMode : a boolean variable which is true when the application is running in local development mode

# Gaelyk Demo

# Tooling

- SpringSource Tool Suite
- AppEngine Eclipse Plugin
- Groovy 1.7
- Gaelyk 0.3.2

# Gotcha's

- App might have to load on request
  - 500:s sadly are common
- The JVM blacklist is trouble
  - Examples
    - Spring fileupload doesn't work (writes to disk)
    - jcaptcha doesnt work as theres no awt
- Next to no unit testing support
- You can't trust the dev server
- Add ignores to web.xml or appengine will think your groovlets and templates are static files
- Putting a POGO in memcache just didn't work, POJO did

# The Good

- Leveraging googles hardware
- No need for account management
  - uses the google accounts
- It's cheap and it scales
  - Disclaimer: might not be cheap when it scales

# Resources

- Gaelyk
  - <http://gaelyk.appspot.com/>
- Will it play on App Engine
  - <http://groups.google.com/group/google-appengine-java/web/will-it-play-in-app-engine>
- Introduction to Gaelyk
  - <https://www.ibm.com/developerworks/java/library/j-javadev2-6/>
- QBRANCH:CODE Blog
  - <http://code.qbranch.se/>
- SweGUG (Swedish Groovy User Group)
  - <http://groups.google.com/group/swegug>