



Jumpstart

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Google App Engine

- ⌘ Platform as a Service (PaaS)
- ⌘ Sandboxed Java implementation
- ⌘ Develop locally on Jetty, deploy to cloud as WAR
- ⌘ Infrastructure and scaling handled by Google

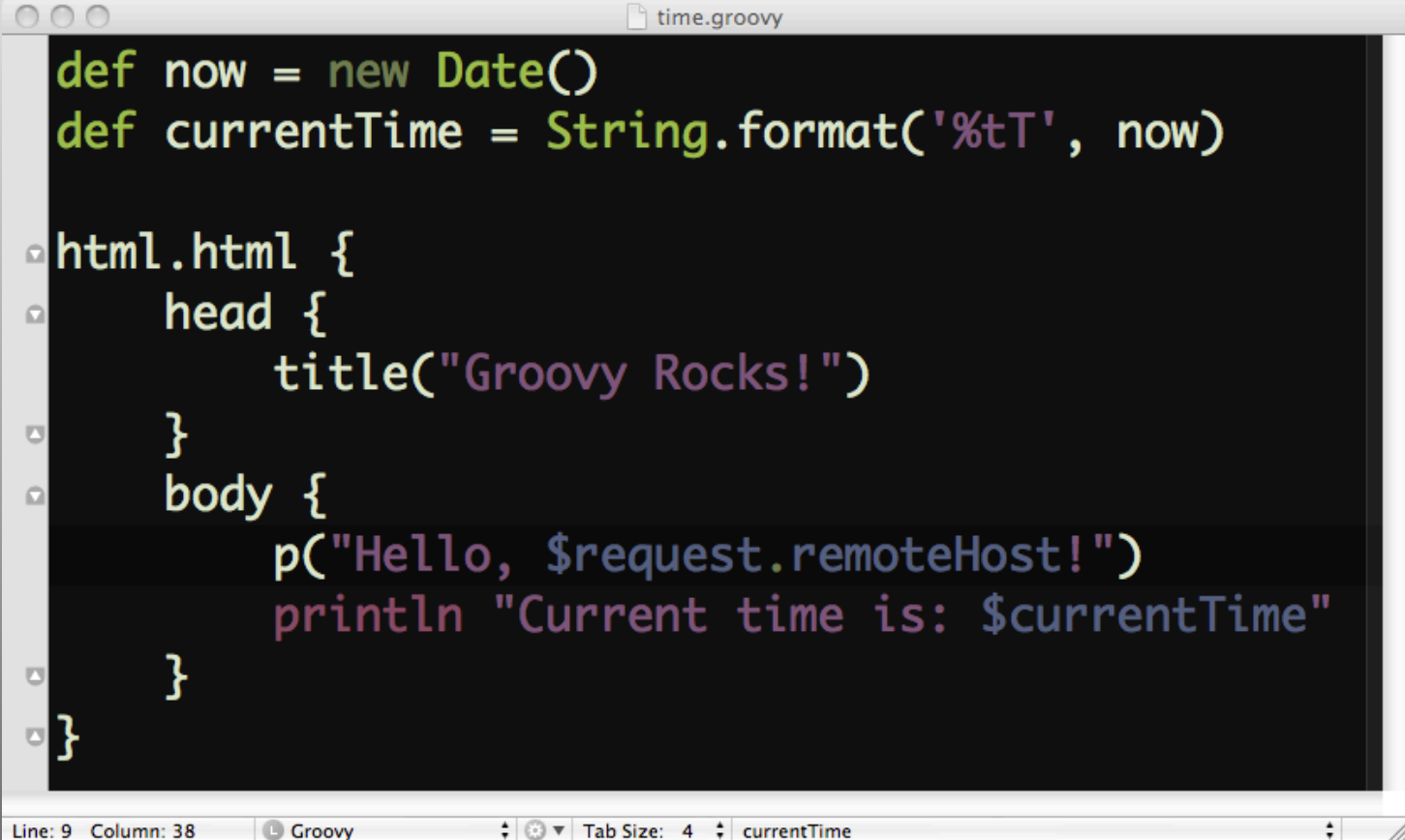
Limitations

- ⌘ Time and size limits
- ⌘ Constrained JVM functionality
- ⌘ Application portability
- ⌘ Environment differences between local and cloud
- ⌘ Not your Plain Old SQL datastore

Gaelyk

- ⌘ Lightweight, extensible Groovy web application toolkit
- ⌘ Syntactic sugar on top of GAE SDK
- ⌘ Separation of view and logic via Groovy templates & Groovlets
- ⌘ Groovy Goodness

Groovlet



The image shows a screenshot of a code editor window titled "time.groovy". The code is written in Groovy and defines a Groovlet. It starts with two function definitions: `def now = new Date()` and `def currentTime = String.format('%tT', now)`. Then, it defines an `html.html` block with a `head` section containing a `title("Groovy Rocks!")` and a `body` section containing a `p("Hello, $request.remoteHost!")` and a `println "Current time is: $currentTime"`. The code is color-coded: keywords like `def`, `new`, `String`, and `println` are in green; strings are in purple; and identifiers like `now`, `currentTime`, `request`, and `currentTime` are in blue. The editor has a dark theme and a sidebar on the left with expand/collapse icons. The status bar at the bottom shows "Line: 9 Column: 38", "Groovy", "Tab Size: 4", and the current variable `currentTime`.

```
def now = new Date()
def currentTime = String.format('%tT', now)

html.html {
  head {
    title("Groovy Rocks!")
  }
  body {
    p("Hello, $request.remoteHost!")
    println "Current time is: $currentTime"
  }
}
```

Line: 9 Column: 38 Groovy Tab Size: 4 currentTime

Groovy Template



```
<html>
  <head>
    <title>Groovy Rocks!</title>
  </head>
  <body>
    <p>Hello, ${request.remoteHost}!</p>
    <%
      def now = new Date()
      def currentTime = String.format('%tT', now)
    %>
    Current time is: ${currentTime}
  </body>
</html>
```

Line: 14 Column: 1 Java Server Page (JSP) Tab Size: 4

URL Routing

```
routes.groovy

// Typical CRUD
get  "/goals",          forward:  "/showGoals.groovy"
get  "/goals/add",      forward:  "/WEB-INF/pages/goal.gtpl"
post "/goals/insert",   forward:  "/insertGoal.groovy"
get  "/goals/delete/@id", forward:  "/deleteGoal.groovy?id=@id"
get  "/goals/edit/@id",  forward:  "/editGoal.groovy?id=@id"
post "/goals/update",   forward:  "/updateGoal.groovy"

// Mapping to all HTTP methods
all  "/help",           redirect:  "/help/latest"

// Validation
get  "/blog/posts/@date", forward:  "/posts.groovy?date=@date",
    validate: { date ==~ /\d{4}-\d{2}-\d{2}/ }
```

Line: 14 Column: 47 Groovy Tab Size: 4

Getting Started

- ⌘ Download the template project from <http://gaeLyk.appspot.com/>
- ⌘ Extract ZIP file to your local file system
- ⌘ Start local Jetty by running `./gradlew gaeRun` from your shell
- ⌘ Browse to <http://localhost:8080/>

Resources



Google App Engine



<http://code.google.com/appengine/>



Gaelyk



<http://gaelyk.appspot.com/>



Simple CRUD with Gaelyk



<http://bit.ly/doBd07>



Available Plugins



<http://gaelyk.appspot.com/plugins>



Source Code



<https://github.com/glaforge/gaelyk>