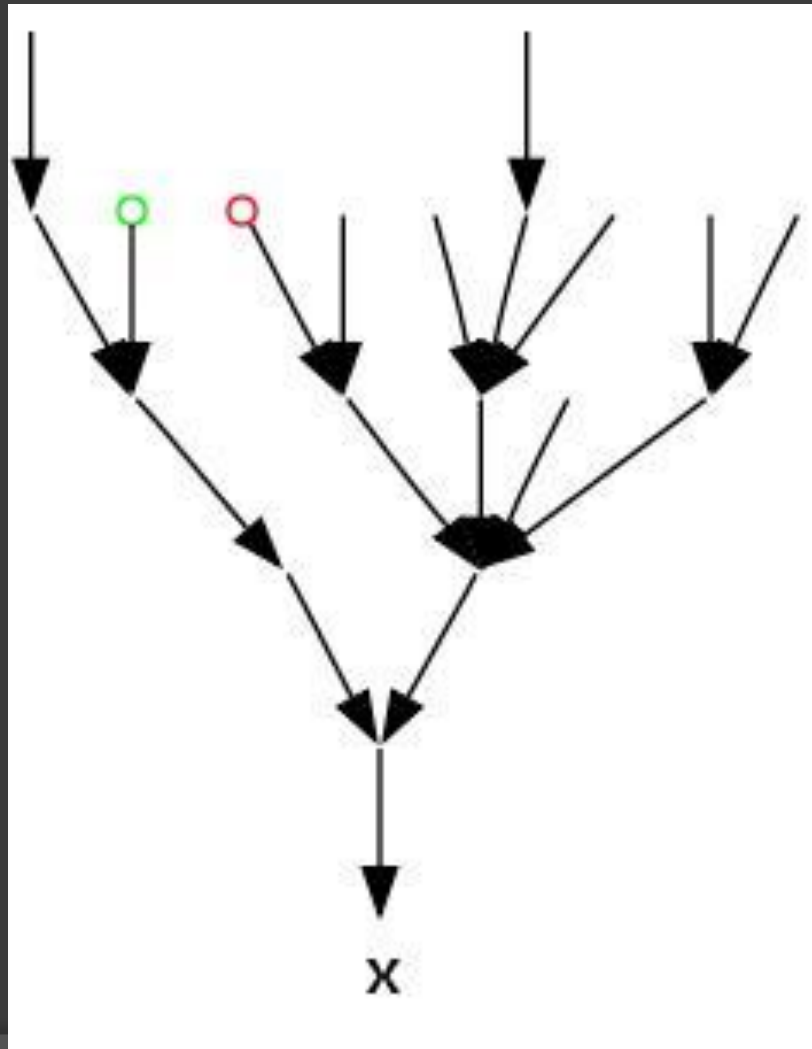


guy.gavriely@gmail.com

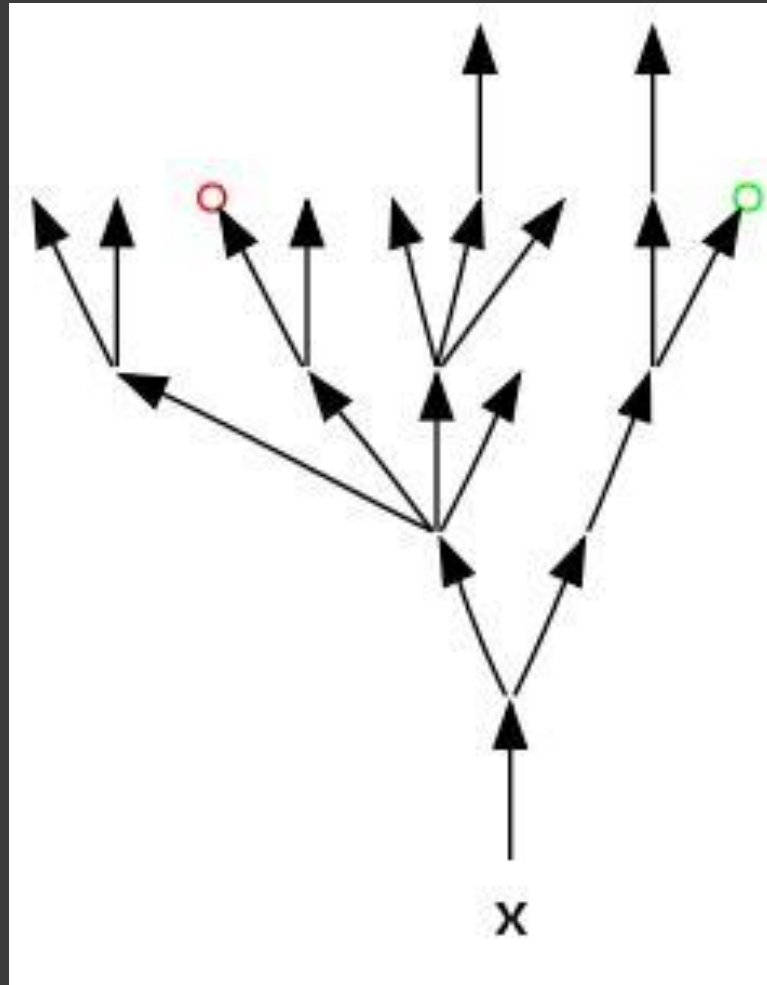
10.01.2011

WEB DEVELOPMENT

Down the stream



Up the stream



Nice & cozy



Mark Shuttleworth



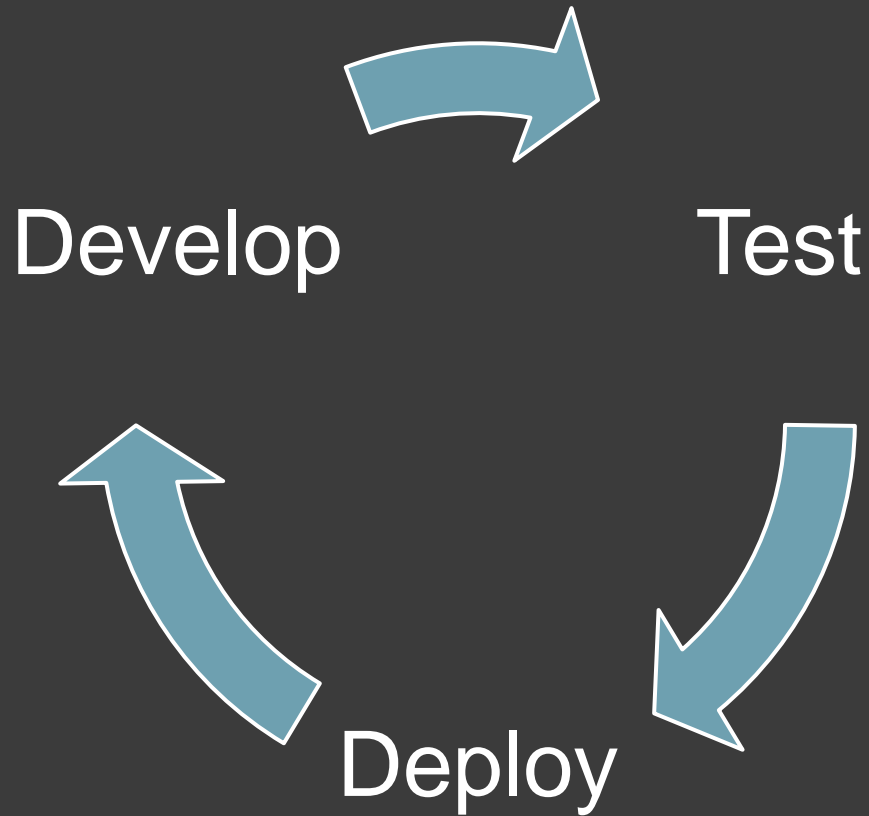
Dual boot Ubuntu + Windows:

<https://help.ubuntu.com/community/WindowsDualBoot>

sources.list

- ⦿ main - Free, fully supported (~4,000 packages)
- ⦿ restricted - Non-free, supported
- ⦿ universe - Free, not supported (disabled by default)
- ⦿ multiverse - Non-free, not supported (disabled/hidden by default)

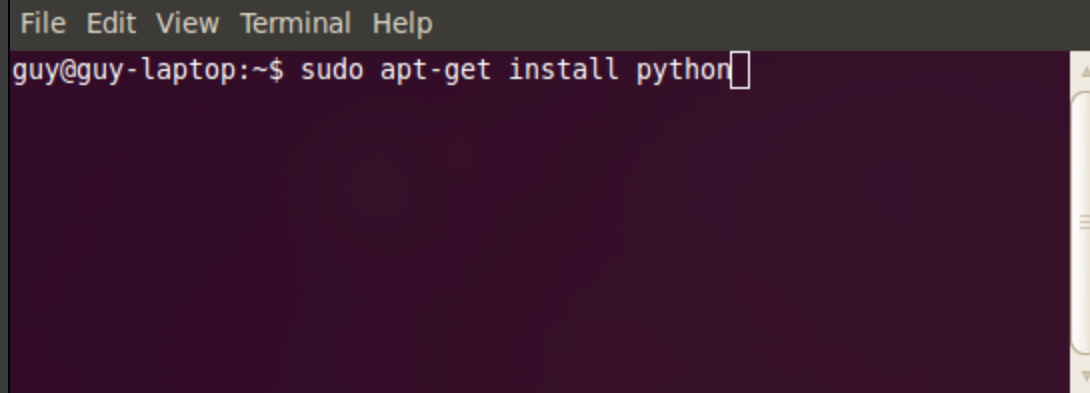
The development cycle



Development tools

- ⦿ IDE – Eclipse, Jbuilder ...
- ⦿ SVN, Git / Mercurial (<http://hginit.com/>)
- ⦿ Ant / Maven
- ⦿ Forums - <http://stackoverflow.com/>

#1 developers tool

A terminal window with a dark purple background and a light grey title bar. The title bar contains the text 'File Edit View Terminal Help'. The terminal content shows the command 'guy@guy-laptop:~\$ sudo apt-get install python' followed by a cursor. On the right side of the terminal, there is a vertical scrollbar with a yellow track and a white slider.

```
File Edit View Terminal Help
guy@guy-laptop:~$ sudo apt-get install python
```

Web development - HTML

```
<html>  
  <head>  
    <title>TAU talk</title>  
  </head>  
  <body>  
    <h1>Hello</h1> world  
  </body>  
</html>
```

Web development - css

```
<html>
  <head>
    <link rel="stylesheet" type="text/css"
          href="mystyle.css"/>
    <style type="text/css">
      body { background-color:#d0e4fe; }
    </style>
  </head>
  <body>
    <h1>Hello</h1> world
  </body>
</html>
```

Web development – Javascript

```
<html>
  <head>
    <script type="text/javascript">
      function f() { alert ('hello'); }
    </script>
  </head>
  <body onload="javascript:f();">
    <h1>Hello</h1> world
  </body>
</html>
```

Web development – jquery

```
<html>
  <head>
    <script type="text/javascript" src="jquery-1.4.3.js"></script>
    <script type="text/javascript">
      $(document).ready(function () {
        $('h1').click(function() { alert ('here'); });
      });
    </script>
  </head>
  <body>
    <h1>Hello</h1> world
  </body>
</html>
```

Web development - Form

```
<html>
  <head>
    <title>TAU talk</title>
  </head>
  <body>
    <h1>Hello</h1> world
    <form method="post" action="say-hello">
      <input type="text" name="hello-name">
      <input type="submit">
    </form>
  </body>
</html>
```

Web development

- ⦿ HTML
- ⦿ Javascript – JQuery, Prototype, YUI
- ⦿ CSS
- ⦿ Flash / Flex vs HTML5
- ⦿ Server side ?

Java for web development

- ◎ Web Server – Tomcat (apache + bridge)
- ◎ Servlets
- ◎ JSP
- ◎ Spring
 - MVC – Spring
 - Hibernate
- ◎ Play framework

Environment Setup

- Eclipse

<http://www.eclipse.org/downloads/>

- Tomcat

<http://tomcat.apache.org/download-70.cgi>

- SVN — eclipse -> help ->install new software

http://subclipse.tigris.org/update_1.6.x

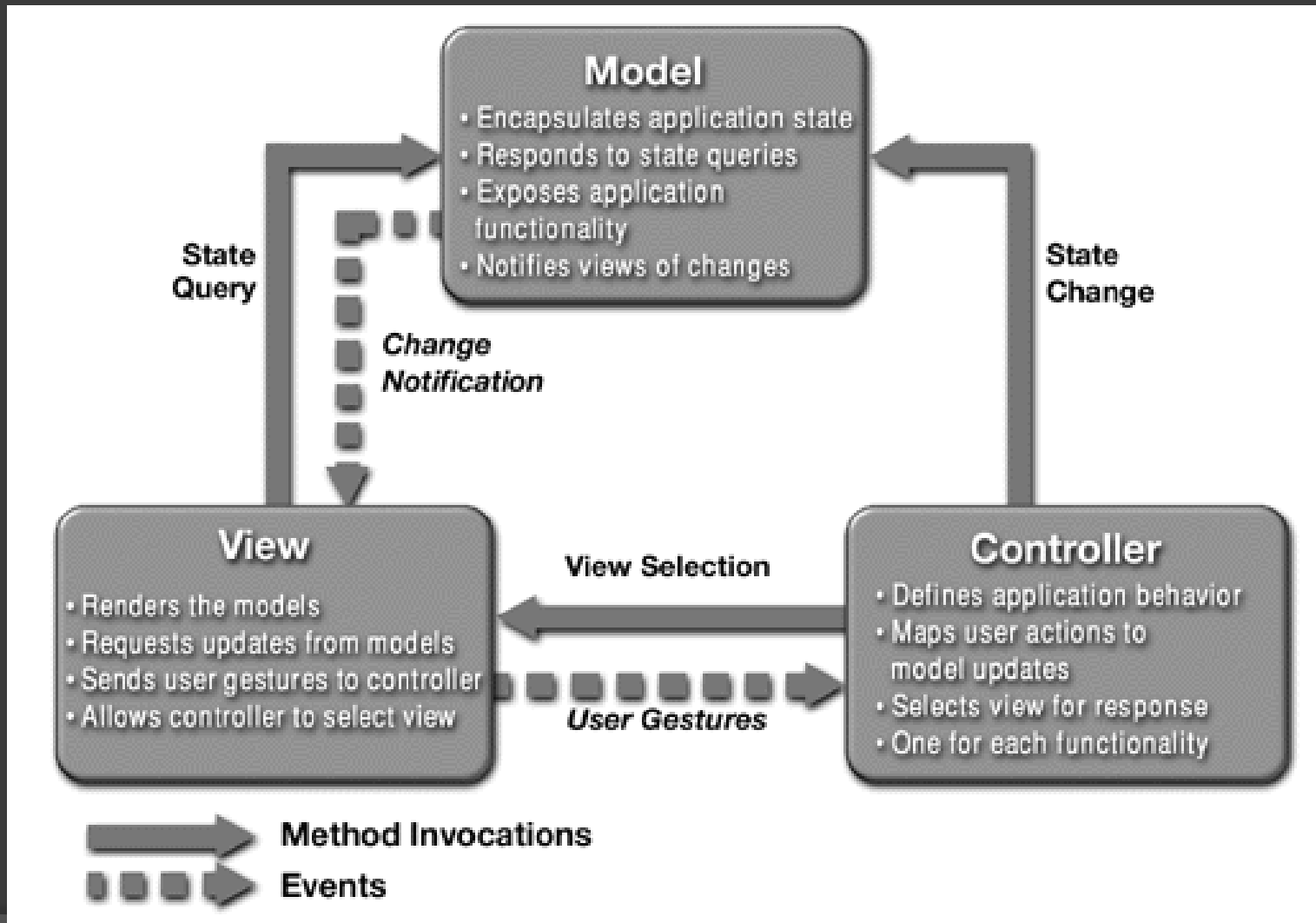
Hello Servlet

```
protected void doGet(HttpServletRequest request,  
    HttpServletResponse response) throws ServletException,  
    IOException {  
    response.setContentType("text/html");  
    PrintWriter out = response.getWriter();  
    out.println("<header><title>TAU Ac.</title></header><body>Hello,  
        world!</body>");  
    out.close();  
}
```

Hello JSP

```
<html>
  <head>
    <%!
      String message = "hello JSP";
    %>
  </head>
  <body>
    <%=message %>
  </body>
</html>
```

Model-View-Controller



Spring MVC

```
public class HelloWorldController implements Controller {  
  
    public ModelAndView handleRequest(HttpServletRequest request,  
        HttpServletResponse response) throws ServletException, IOException {  
  
        String aMessage = "Hello World MVC!";  
  
        ModelAndView modelAndView = new  
            ModelAndView("hello_world");  
        modelAndView.addObject("message", aMessage);  
  
        return modelAndView;  
    }  
}
```

Hello_world.jsp

```
<html>  
<body>  
    <p>This is my message: ${message}</p>  
</body>  
</html>
```

Model Layer

- ◉ ORM – Object Relational Mapping
- ◉ Hibernate – cache
- ◉ HQL
select new Family(mother, mate, offspr)
from DomesticCat as mother
join mother.mate as mate
left join mother.kittens as offspr

Play!

<http://www.playframework.org>

Server side scripting

- ⦿ Python
- ⦿ PHP
- ⦿ Ruby on Rails

Groovy Grails – environment

- Eclipse STS

<http://www.springframework.com>

- Install Groovy and Grails from the STS dashboard

grails

```
$ grails create-app test
```

```
$ cd test
```

```
$ grails run-app
```

```
....
```

```
$ grails create-domain-class org.tau.Student
```

```
Edit using eclipse...
```

```
$ grails generate-all com.knowhowguy.Person
```

```
$ grails run-app
```

Setting up your own service

- ① Design
- ② Decide on OS
- ③ Decide on platform
- ④ Hosting