Coding 101

Prescott Computer Society
Developers' SIG
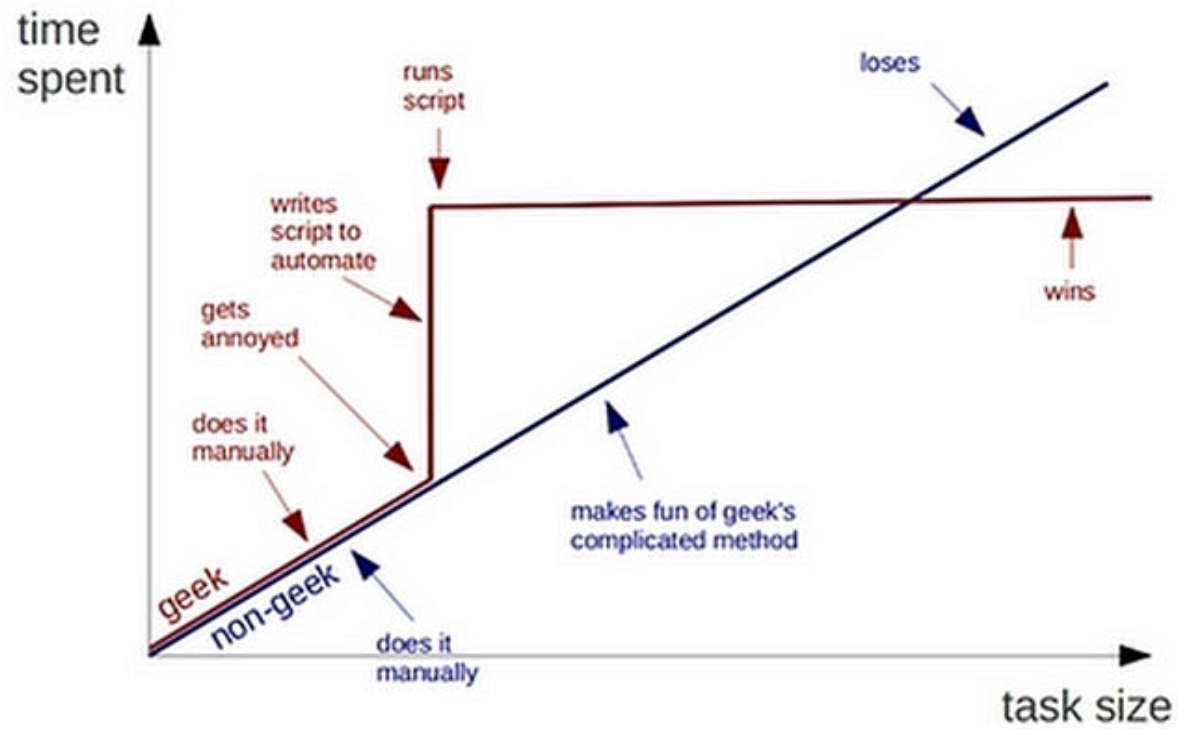## Initial Meeting

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Ray DeCosta
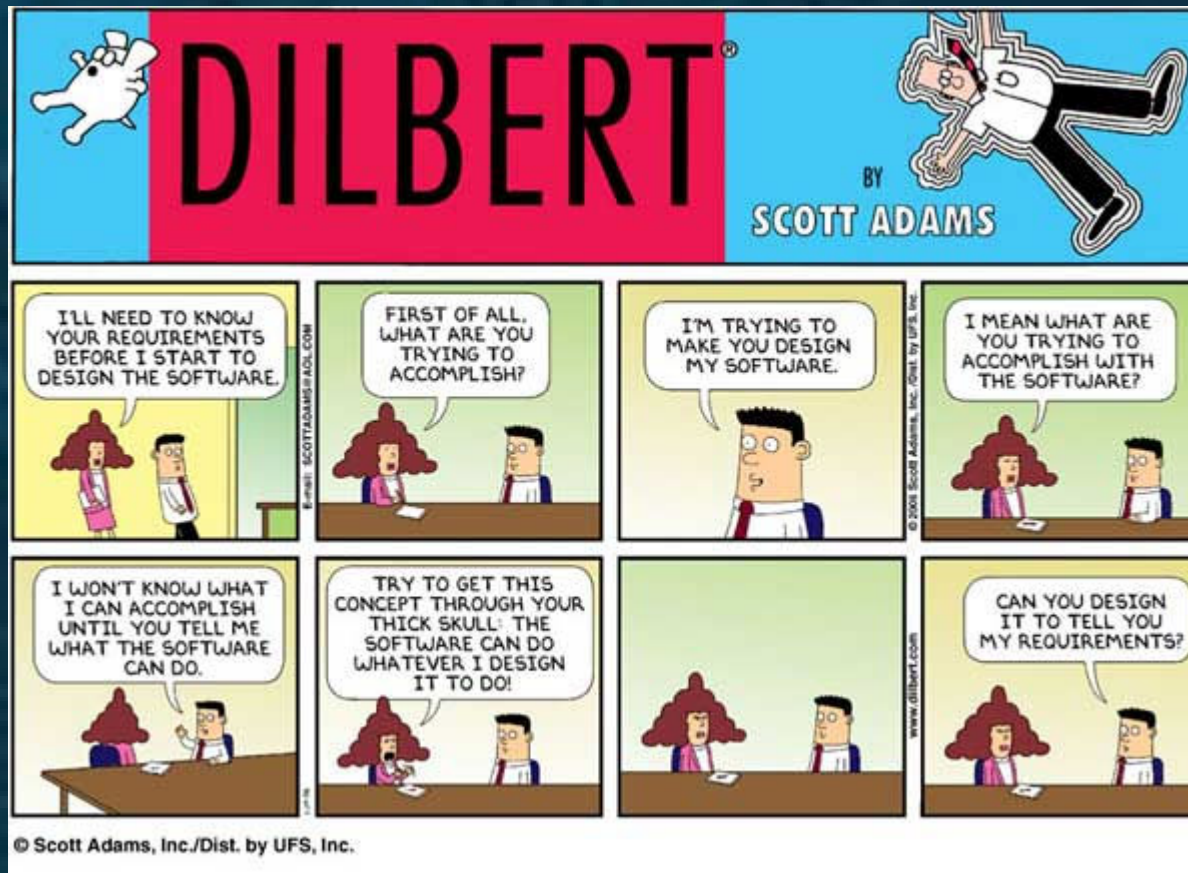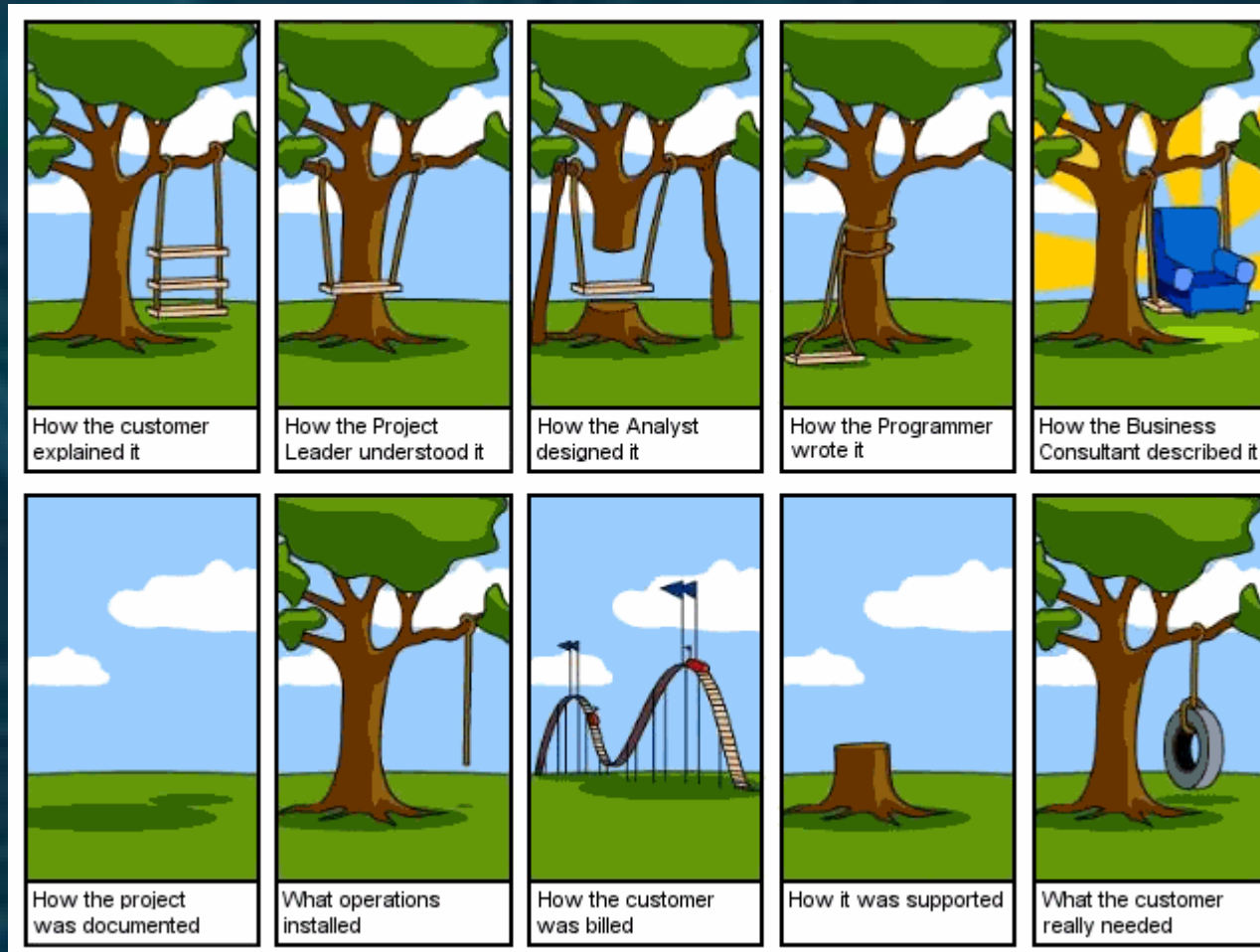### June 1, 2013

Geeks Win!

Geeks and repetitive tasks

How to Design Software

Software Design Explained

How the customer explained it | How the Project Leader understood it | How the Analyst designed it | How the Programmer wrote it | How the Business Consultant described it

How the project was documented | What operations installed | How the customer was billed | How it was supported | What the customer really needed
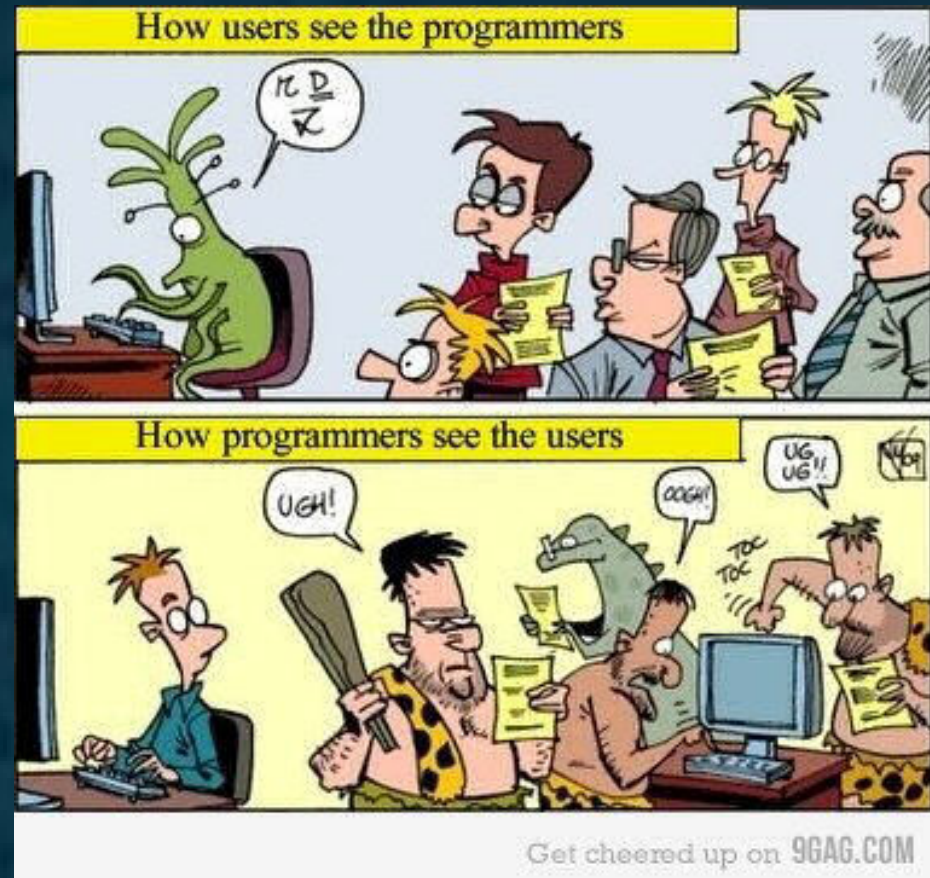
Today's Discussion

Computer code languages

FREE coding resources

Website design

Demos
   I'll demo everything
   we talk about

Computer Code Overview

Many different code languages in common use

HTML and CSS – websites

Visual Basic and C – websites and computer applications

Java – Android apps

XML – small databases
eXtensible Markup Language

Coding a Website

A website is basically just a bunch of code

HTML = <u>H</u>yper<u>T</u>ext <u>M</u>arkup <u>L</u>anguage
- Hypertext = text that links to other pages
- HTML code is not pretty – at first
- On any website: Right-click -- "View Page Source"

CSS = <u>C</u>ascading <u>S</u>tyle <u>S</u>heets
- Contains instructions for styling website
- Can easily change look of entire site

Databases
- Access, Excel and XML

geek inside

ASP.Net

Active Server Pages Extended

ASP.Net pages have **ASPX** extension

Not to be confused with ASP a/k/a "Classic ASP"

ASP went away in 2002

ASP.Net is now often referred to as ASP

[Note to self: Sigh dramatically]

Server dynamically generates web pages

Allows for Master Pages – a great advancement

Creates database results on-the-fly

Makes the programmer's life MUCH easier

Very closely related to Visual Basic and C

If you know one, you can easily pick up the other

Free Resources

All the applications mentioned today are FREE!
- Professional-level programs

Usually have to register to use
- No spam worries

You can write code with any text editor
- Even Notepad will work
- But it will be a struggle

Free downloadable fonts
http://www.1001freefonts.com/

Hey Sport, there's a **huge sale** today so I'm going in to buy some software. You need anything?

Uh.. You lost me at: "buy some software."

Expression Web

Website design and maintenance

I use Exp. Web to write the weekly newsletter

Requires some familiarity with CSS and HTML

WYSIWYG = What You See Is What You Get
  Must preview in different browsers to check results

Available at:
http://www.microsoft.com/en-us/download/details.aspx?id=36179

Help forum:
http://social.expression.microsoft.com/Forums/en-US/web/threads

Visual Basic, C and ASP.Net

Microsoft's Visual Studio **Express** 2010 or 2012

 XP – uses only 2010 version

 Best to get the "2010 All-In-One ISO"

 http://www.microsoft.com/visualstudio/eng/downloads

2010 version needs SP1

 Click "Install Instructions"

 Then look for the ".ISO format." link

 http://www.microsoft.com/en-us/download/details.aspx?id=23691

Get both as an ISO and burn disc images to CD or DVD

Help forums:

 http://forums.asp.net/

 http://www.dreamincode.net/

 http://vbforums.com

Example VB.Net Program

I'm a confessed cheapskate!

I didn't want to pay for over-priced check printing
   Circa 2000

Staples had blank checks with software

Software was poorly designed so I wrote my own

Cost is not as big a deal these days
   1,000 blank checks = $30

Visual Web Developer Express

Included in All-In-One ISO

Better than Exp. Web for website databases
  - Makes interfacing with databases "easier"
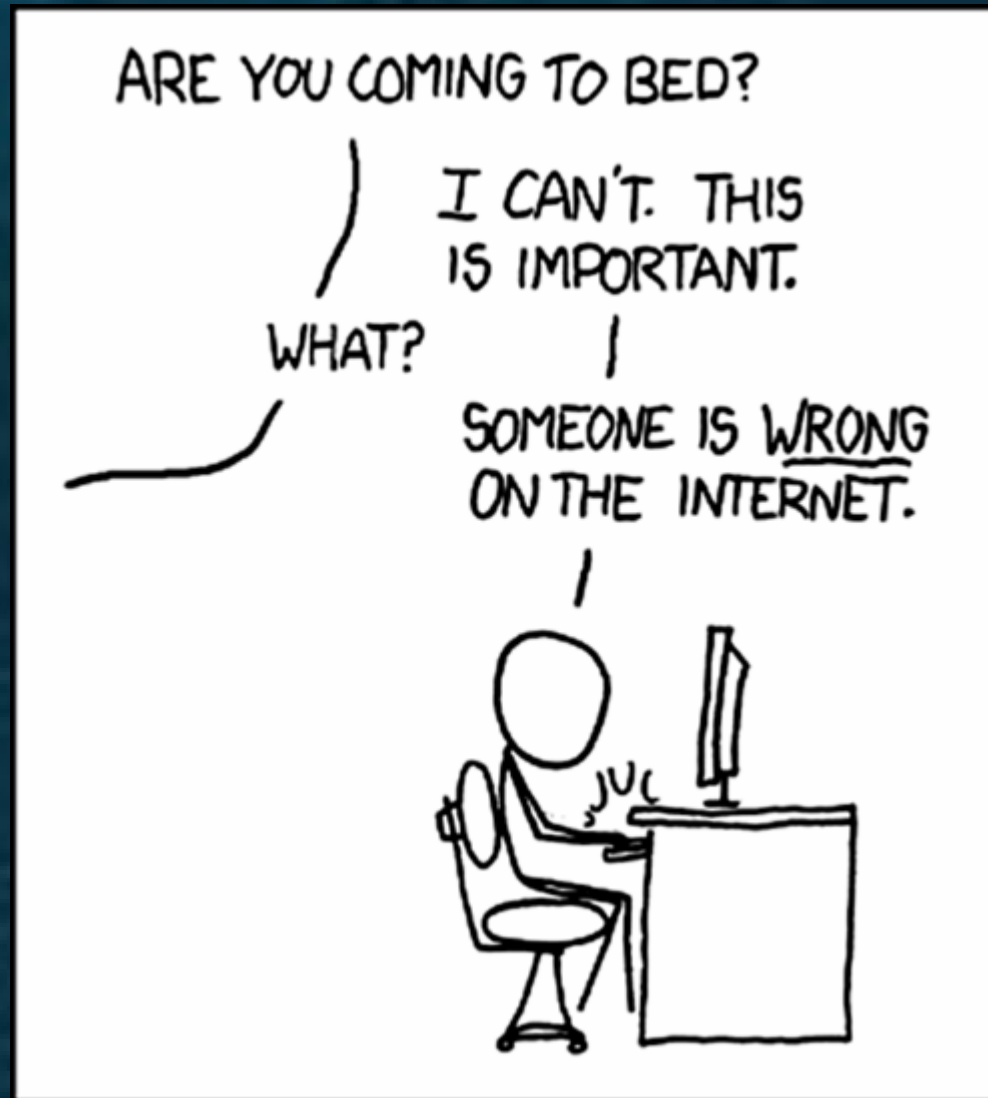 - Not as good as Exp. Web for routine website work

Like Expression Web only different
  - Interface changes can be confusing

Can go back and forth between applications
  - Use which one works best for the task at hand

Humorous Interlude

Expression Design

Use for graphic design in logos, mastheads, etc.

Developed by Adobe **and** Microsoft!

Uses vector graphics for higher resolution and detail

Use both Exp. Design and Elements to create artwork

Available at:
http://www.microsoft.com/en-us/download/details.aspx?id=36180

Help forum:
http://social.msdn.microsoft.com/Forums/en-US/design/threads

Android Apps

Apps for the Android are written in Java

Uses the Eclipse SDK
- Software Development Kit
- Gets very technical in a big hurry
- This is a difficult install
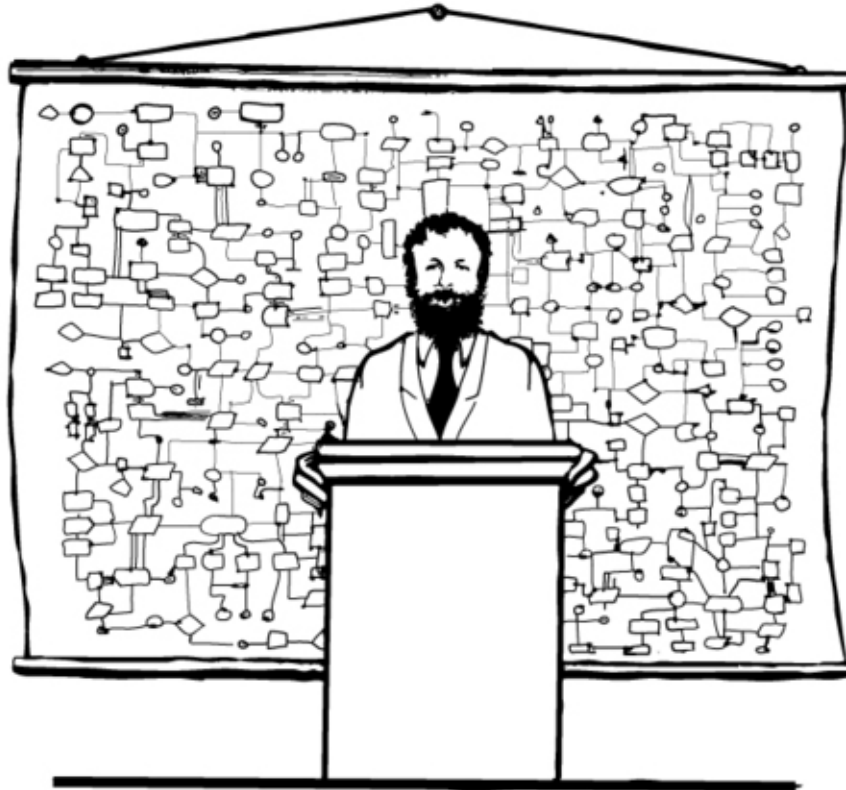- Stock up on patience

Many FREE Plug-ins are available
- Database development **NEEDS** SQLite Manager
- http://www.coderzheaven.com/2011/04/18/sqlitemanager-plugin-for-eclipse/

Available at:
http://developer.android.com/sdk/index.html

Humorous Interlude

"Now that you have an overview of the system, we're ready for a little more detail"

Where Do I Get Help?

Can dig thru the big fat books

You'll find that Google is indeed your best friend!

Must have an idea what you're looking for

Try different coding examples until one works
- Wide-screen monitor or dual monitors

Avoid "answers" that include:
- "You might try this."
- "I haven't tested this, but . . ."
- "This should work . . ."

Now let's do some demos!