# Why be a developer?

Sam Dutton 11 July 2011



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Peter Oppenheimer Senior Vice President and Chief Financial Officer



Tim Cook Chief Operating Officer



Philip W. Schiller Senior Vice President Worldwide Product Marketing



Scott Forstall Senior Vice President iPhone Software



Bertrand Serlet Senior Vice President Software Engineering



Jonathan Ive Senior Vice President Industrial Design



Bruce Sewell Senior Vice President and General Counsel



Ron Johnson Senior Vice President Retail



Jeff Williams Senior Vice President Operations



Bob Mansfield Senior Vice President Mac Hardware Engineering



Steve Ballmer Chief Executive Officer



Lisa Brummel
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Kurt DelBene President, Microsoft Office Division



Peter Klein Chief Financial Officer



Andrew Lees President, Mobile Communications Business



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Mich Mathews Senior Vice President, Central Marketing Group



Don A. Mattrick President, Interactive Entertainment Business



Bob Muglia President, Server and Tools Business



Craig Mundie
Chief Research and Strategy
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Rick Rashid Senior Vice President, Research



Eric Rudder Senior Vice President, Technical Strategy



Steven Sinofsky President, Windows and Windows Live Division



Brad Smith (LCA)
General Counsel and Senior
Vice President, Legal and
Corporate Affairs



B. Kevin Turner Chief Operating Officer



Hank Vigil
Senior Vice President,
Consumer Strategy and
Partnerships

















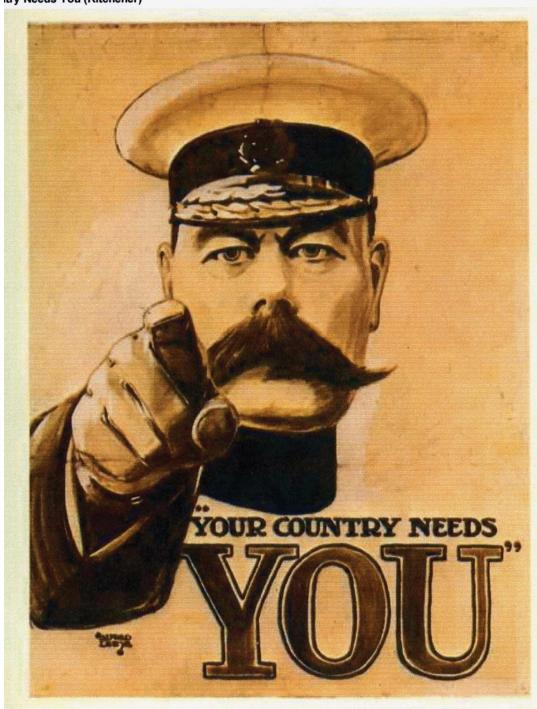


#### The world is run by men!

- Nearly all tech execs are men
- Most of what you do and use and see on computers is controlled by men
- Only 13% of Wikipedia contributors are women
- ...and so on

Yet women use computers as much as men!

itry needs You (Nitchener)



# Why?

- Fulfilling
- Exhilarating
- Lots of jobs
- Well paid (if you're lucky)
- Flexible

### Fulfilling

- People are using computers everywhere, all the time
- Make things that make a difference

### Exhilarating

- Build a website
- Sell a mobile app
- Code a successful business application
- Contribute to an open source codebase

### Expanding job market

- Google added 4,565 workers in 2010
  - this year plans over 6000
- IT jobs have increased in a difficult economy

#### £££

- Experienced web contractors make around £350/day
- £500-£1000/day for financial specialists

### Flexible



#### Flexible

- Part time
- Work from home
- Flexible/variable hours
- Permanent, contract, consultant, volunteer
- Variety of sectors: media, finance, scientific, charity...
- Variety of corporate cultures, stress levels, team size
- Transferrable skills
- International
- Babies!
- Other commitments: family, volunteering...

#### The bad news

- Jobs can be insecure
- IT can be low status
- In some jobs, mostly men!
- Some IT departments really are like The IT Crowd

#### What sort of jobs?

- More technical: city analysts, researchers
- Less technical: web developers, technical managers
- 'People jobs': marketing, audience
- Graphic design
- User experience
- Data versus content
- Platforms
- Specialisms: sectors, product, skill sets, languages...

# tiobe.com

Position Jun 2011	Position Jun 2010	Delta in Position	Programming Language	Ratings Jun 2011	Delta Jun 2010	Status
1	2	Ť	Java	18.580%	+0.62%	Α
2	1	1	С	16.278%	-1.91%	Α
3	3	=	C++	9.830%	-0.55%	Α
4	6	<b>tt</b>	C#	6.844%	+2.06%	Α
5	4	1	PHP	6.602%	-2.47%	Α
6	5	1	(Visual) Basic	4.727%	-0.93%	Α
7	10	ttt	Objective-C	4.437%	+2.07%	Α
8	7	1	Python	3.899%	-0.20%	Α
9	8	1	Perl	2.312%	-0.97%	Α
10	20	1111111111	Lua	2.039%	+1.55%	Α
11	12	T T	JavaScript	1.501%	-0.58%	Α
12	11	1	Ruby	1.484%	-0.61%	Α
13	9	1111	Delphi/Object Pascal	1.070%	-1.50%	Α
14	16	<b>tt</b>	Lisp	0.935%	+0.28%	Α
15	15	=	Pascal	0.731%	+0.00%	Α
16	-	=	Assembly*	0.673%	-	В
17	21	1111	Transact-SQL	0.651%	+0.16%	В
18	25	1111111	RPG (OS/400)	0.637%	+0.22%	В
19	23	1111	Ada	0.606%	+0.17%	В
20	-	=	Scheme*	0.579%	-	В

#### Sectors

- Financial services
- Banking
- Media
- Government
- Academic
- Charity
- blah
- blah
- blah

## Size

- Small
- Medium
- Large

# The big split

- IT
- Developers
- Both can be good, both can be boring!

### Four types of company

- No IT staff
- IT staff but no developers
- IT staff and developers
- Tech-led company

### Developer teams: typical roles

- One boss: moderately technical or used to be technical
- One project manager
- Senior developers
- Junior developers
- Systems person: the hairy bloke who runs the servers
- User experience designers: the overview
- Interface designer: the detail
- Graphic designers (if you're lucky)
- Random freelancers

### What do you actually do?

- Project management and bureaucracy
- Meetings and standups
- Write tests
- Write applications
- Build prototypes
- Iterate
- Maintain software
- Teach others
- Learn

#### What makes a good developer?

- Passion
- Sanity
- Focus
- Learning
- Communication
- Business skills
- Maths

## How people work

- Permanent
- Contract
- Freelance
- Unpaid

#### Qualifications?

Lots of successful developers don't have tech qualifications

# BUT

More and more places (BBC, Google, Facebook...) expect a computer science degree and some maths

#### How to get a job

- Who am I? What do I have that makes me special?
- Reconnaissance
- Play with computers
- Find a mentor
- Read
- Get certified, take a course
- Get a foot in the door
- Make something, do something
- Sort out your CV
- NETWORK

# Ways in

- Non-tech jobs
- Data entry
- Admin
- Application power user
- Customer service
- Tech support

#### Interviews

- Prepare
- Prepare
- Prepare
- Find out about the interview format
- Find out about the job
- Get to know the company
- Get to know the department
- Think what they're going to ask you

How to get a job

Make something

Do something

# Why?

- Computers in everything
- Everything connected
- Everything recorded
- Everywhere
- All the time

### A problem and an opportunity

- ICT GCSE: 33% drop in three years
- A level ICT: 33% drop in six years, 57% in eight years

#### What can I do now?

- Find a mentor
- Learn a computer language: Ruby, Python, JavaScript
- Play with hardware: Arduino
- Build a website: HTML, CSS and JavaScript
- Think about something you want to do and do it!

# Any questions?