Before we begin...

- Connect to the WiFi...
  - `MiSK` (username)
  - `Misk12345` (password)

Welcome to WDI | أهلا وسهلًا

A huge welcome, from...

- [General Assembly](#)
- [The MiSK Foundation](#)
- Jack Jeffress (Lead Instructor)
- Trevor Preston (Lead Instructor)
- Moath Althawad (Associate Instructor)
- Dr. Aliah Aljowaie (Course Manager)

Agenda

- Overview of the course
- Structure of the course
- Benchmarks
- Installation
- Some Advice
- The Command Line

Learning Objectives

- Understand the structure of the course
- Install, configure and understand software and tools
- Get an introduction to the command line
- Be able to accomplish day-to-day tasks with the command line

Let's get into it!

Overview of the Course

So, what is WDI?

The **W**eb **D**evelopment **I**mmersive

It runs all around the world

Huge alumni community, great career prospects

Web Development?

The creation and management of both websites and web-based applications

Made up of the front-end and the back-end

Some developers will try to convince you that it is magic...

What have you gotten yourself into?

To be a good developer, you ought to:

- Have a high capacity for frustration
- Not mind reading documentation
- Be comfortable with "imposter syndrome"
- Enjoy solving problems and the little wins
- Be comfortable editing text
- Be comfortable knowing there is always more

A typical day here

Time	Activity
09:00 -> 10:00	Warmup
10:00 -> 12:00	Lecture / Codealong
12:00 -> 01:00	Lecture / Codealong
01:00 -> 02:00	Lunch
02:00 -> 02:30	Review
02:30 -> 04:00	Labs / Codealong
...	Homework / Extra / Review

A typical day as a developer

Time	Activity
09:00 -> 09:30	Emails, News
09:30 -> 09:45	Standup Meeting
...	Code
	40% Writing Code
	60% Figuring out what's going wrong

The Structure of the Course

Week	Content
01 & 02	Front End
03	Project 00
04 & 05	Back End
06	Project 01
07 & 08	Advanced Front End
09	Project 02
10 & 11	Advanced Back End / Other
12	Project 03

The Structure of the Course

We follow the development of the web itself

- We start by learning programming
- Then we create pages by hand
- Then we get the back end to create HTML
- Then we get into Single Page Applications
- Then we get into lots of other fancy stuff

Resources!

[Classwork & Slides](#)

[Homework Repository](#)

[Gitbook (Notes)](#)

Maximising Value

"Immersive" is right!

- Ask thousands of questions and get help
  - Not just in class!

- Do far more than is asked!
- Embrace the jargon and "nerd" culture
- Treat every day like a job opportunity
- $\Delta U = q + w$

Maximising Value

- Communicate
- Use Slack heavily!
- Keep a blog
- Write notes
- Avoid Facebook (and cancel your social life)
- Fail early, fail often and fail differently
- Don't always think in code
- Share everything
    - Not just code!

Maximising Value

- We are the sum of our habits
- Side projects are our friends
- Read and learn from other code
- Code for your colleagues
- You don't have to work all of the time
- Work with each other as much as possible

[The Tao of Programming](#)

[The Jargon File](#)

Larval Stage: N.

"Describes a period of monomaniacal concentration on coding apparently passed through by all fledgling hackers. Common symptoms include the perpetration of more than one 36-hour hacking run in a given week; neglect of all other activities including usual basics like food, sleep, and personal hygiene; and a chronic case of advanced bleary-eye. Can last from 6 months to 2 years, the apparent median being around 18 months. A few so afflicted never resume a more 'normal' life, but the ordeal seems to be necessary to produce really wizardly (as opposed to merely competent) programmers."

- **The Jargon File.**

Book 2.1

After three days without programming, life becomes meaningless

Sign Up / Bookmark

- [Newsletters](#)
- [Web Inspiration](#)

How to get help?

- Have the relevant files / links open
- Be ready to explain:
    - What you expect to happen
    - What seems to actually be happening
    - What you think the problem might be (optional)
- Raise your hand

How to ask questions?

- Be specific
- Don't paste lots of code into Slack, use a snippet
- Don't use private messages for things that aren't private
    - Collaborate so everyone can benefit!
- Here is [an article](#)

How to ask questions?

"What we [developers] are, unapologetically, is hostile to people who seem to be unwilling to think or to do their own homework before asking questions."

- **Eric S. Raymond and Rick Moen**

The Wolf Pack

Help each other out!

- Move faster towards Mastery
- Collaborating is a powerful tool
  - Plus, it's the industry standard
  - Often called **pair programming**

What will go wrong?

Everything! This won't be easy for anyone.

"If debugging is the practice of removing bugs from software... Then programming must be the practive of adding them." – *E. W. Dijkstra*

The best thing you can learn is **how to debug**

Some Frank Advice

- Try everything and see
- Learn how you learn
- Hit pause on your social life
- Stay off Facespace, whatever it is now
- Ask every question possible
- Write and fix as many bugs as possible
- Do way more than is asked
- Make this the most intense 3 months of work you've ever done
- But also the most fun

Let's get into it!