

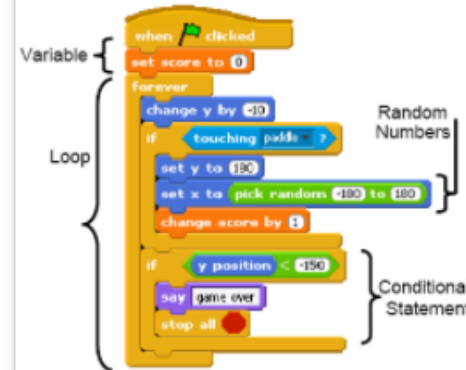


Tutors Setup

a small tool for
generating
instructional material

Programming - Introductory

Programming Fundamentals I
(Scratch)



This is an introductory Programming module and assumes no prior knowledge of programming. For the first week or two, we will use Scratch to teach some basic programming concepts. We will work through non-complex problems that will introduce you to the basic constructs of programming languages i.e. Sequence, Selection and Loops.

Dr. Siobhan Drohan & Ms. Mairead Meagher

Programming Fundamentals I
(Processing)



This is an introductory Programming module and assumes no prior knowledge of programming. We will use the Java programming language through the Processing Development Environment (PDE). We will work through non-complex problems that will introduce you to the basic constructs of programming languages i.e. sequence, selection and loops. You will also learn to use different data types and manipulate the data.

Dr. Siobhan Drohan & Mairead Meagher

Programming Fundamentals
(Java)



The objective of this module is to provide a basic introduction to the Java language. The course assumes no prior programming experience, begins at a slow pace with simple concepts but progressively adds more complex topics. It is essential to gain a fundamental understanding of the language as later course modules such as Web and Android development use Java extensively.

John Fitzgerald

Programming - Intermediate

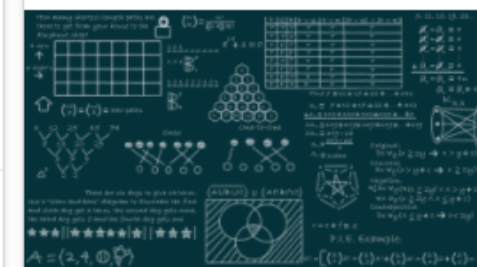
Data Structures



The objective of this course is to provide a comprehensive introduction to developing modern Java Applications built around Data Structures. Our objective is to provide the student with the skills required to construct efficient and reliable Java applications of moderately complexity.

David Drohan & Peter Carew

Algorithms



An introduction to algorithms in Java

Frank Walsh & Eamonn De Leastar



Tutors

Top Level Topics

Eamonn de Leastar
(edelestar@wit.ie). Creative
Commons License

All Slides

All Labs

Setting up Tutors



Setting up and configuring the tools tutors requires, and tutors itself. These are: git, node.js and the sublime text editor.

Composing Labs



Explore the structure and contents of Labs. Introduce the basics of Markdown and demonstrate the primary features.

Publishing Courses



Publish course to the public Internet using github, and make individual topics available to Moodle.

Managing a Portfolio



Aggregating multiple modules into a portfolio.

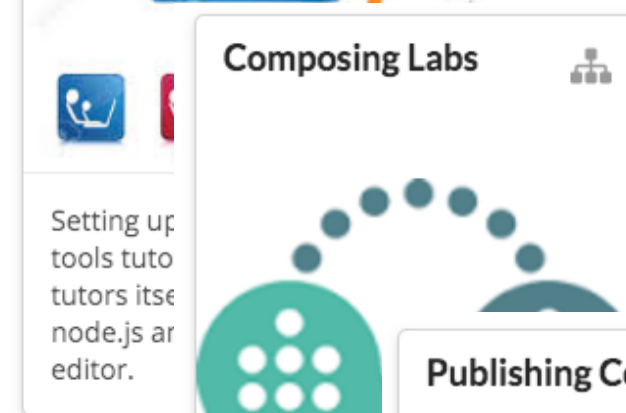
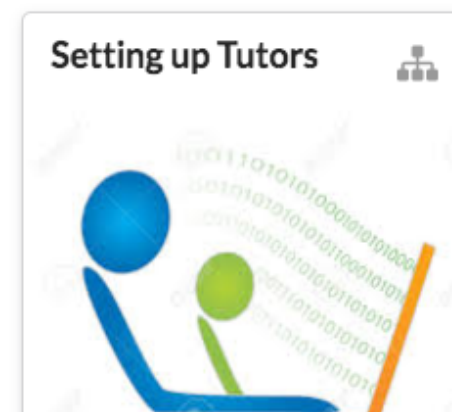
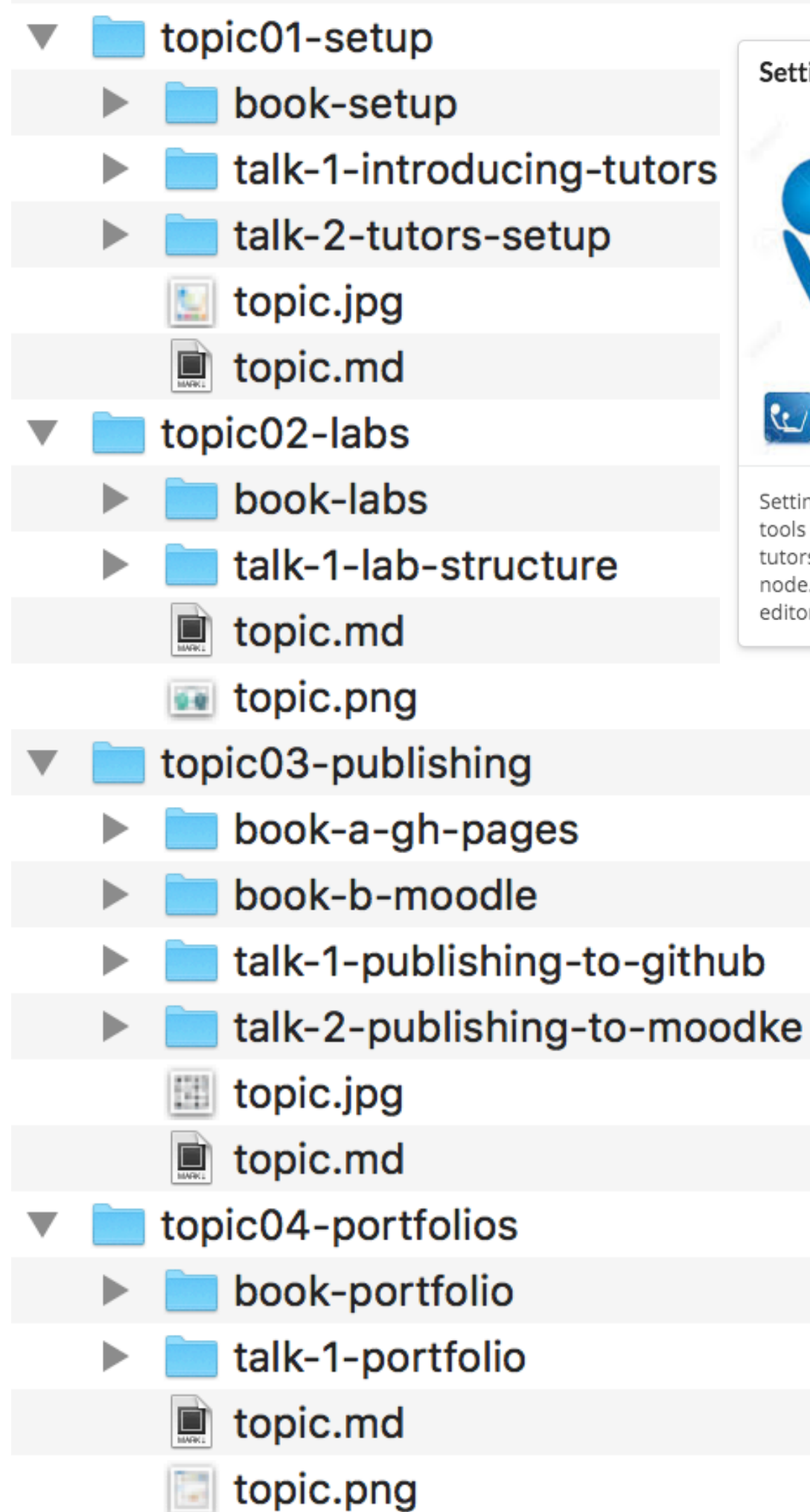
4 topics

semantic
folder/file
names


topicXXX ->
topic

bookXXX ->
lab

talkXXX ->
talk



Setting up Tutors



Setting up and configuring the tools tutors requires, and tutors itself. These are git, node.js and the sublime text editor.


- ▼ topic01-setup
 - ▶ book-setup
 - ▶ talk-1-introducing-tutors
 - ▶ talk-2-tutors-setup
- topic.jpg
- topic.md

Tutors Setup




Installing the tools needed for tutors. Taking it for a spin.

Introducing Tutors



A quick tour of the purpose, structure and features of a tutors course web site.

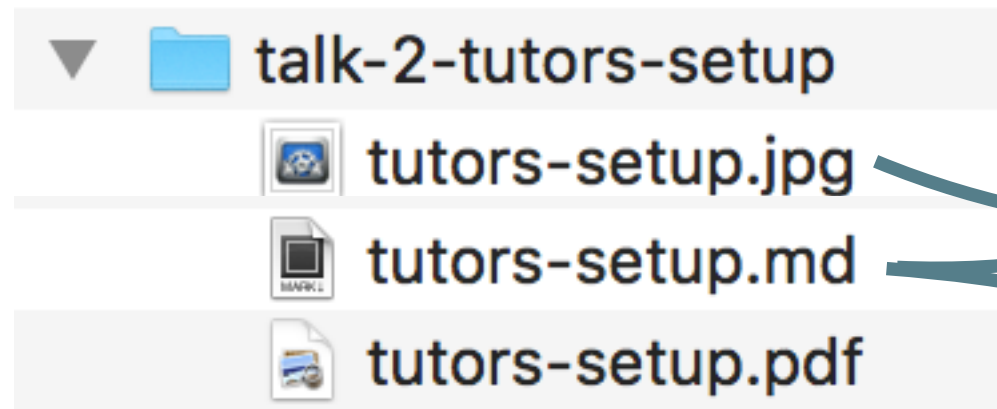
Lab-01-Setup



Install the tutors command line application and take for a first spin.

topic structure

talk structure



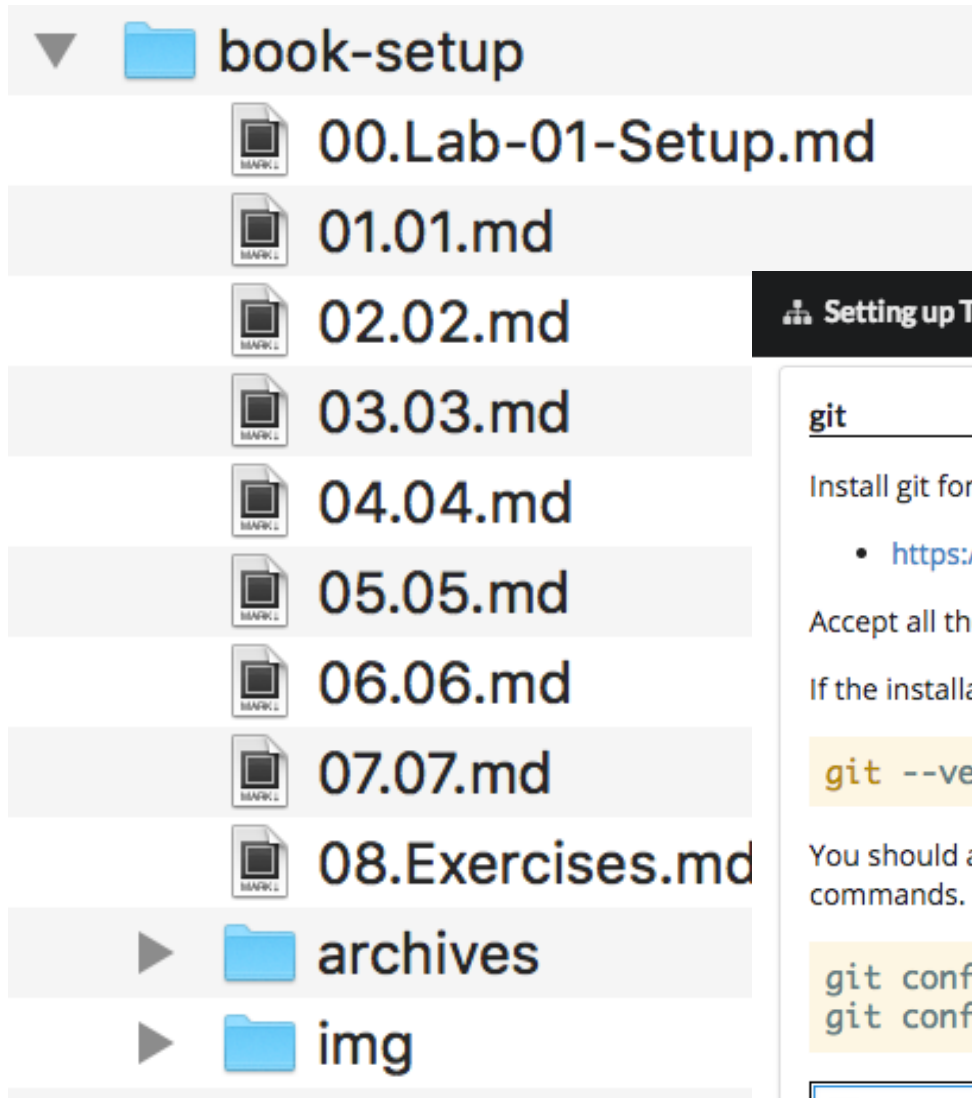
all files - image
same - pdf
name - markdown



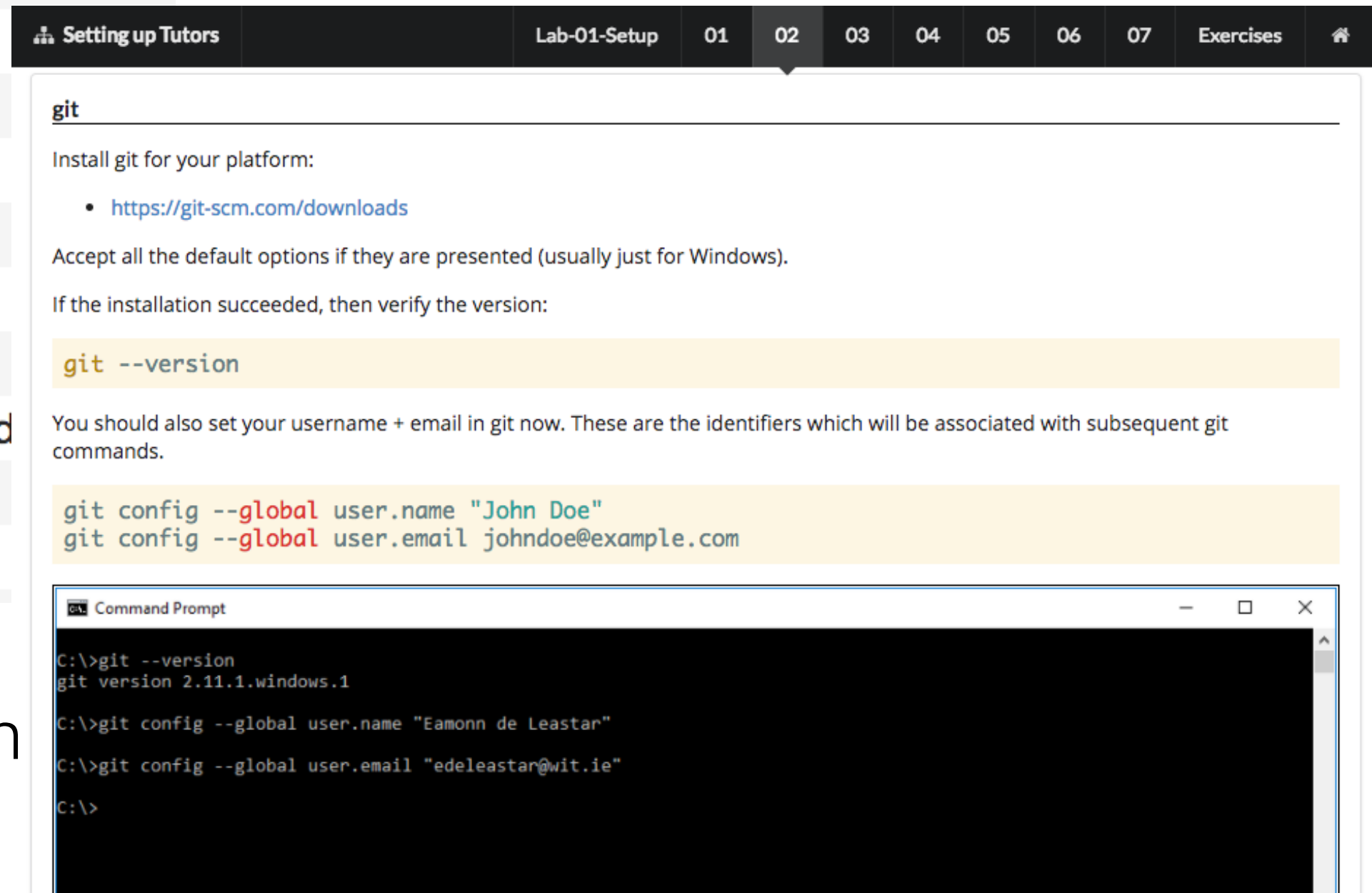
Tutors Setup

Installing the tools needed for
tutors. Taking it for a spin.

lab structure



one *md* file per step



Setting up Tutors Lab-01-Setup 01 02 03 04 05 06 07 Exercises Home

git

Install git for your platform:

- <https://git-scm.com/downloads>

Accept all the default options if they are presented (usually just for Windows).

If the installation succeeded, then verify the version:

```
git --version
```

You should also set your username + email in git now. These are the identifiers which will be associated with subsequent git commands.

```
git config --global user.name "John Doe"
git config --global user.email johndoe@example.com
```

```
Command Prompt
C:\>git --version
git version 2.11.1.windows.1

C:\>git config --global user.name "Eamonn de Leastar"
C:\>git config --global user.email "edeleastar@wit.ie"
C:\>
```

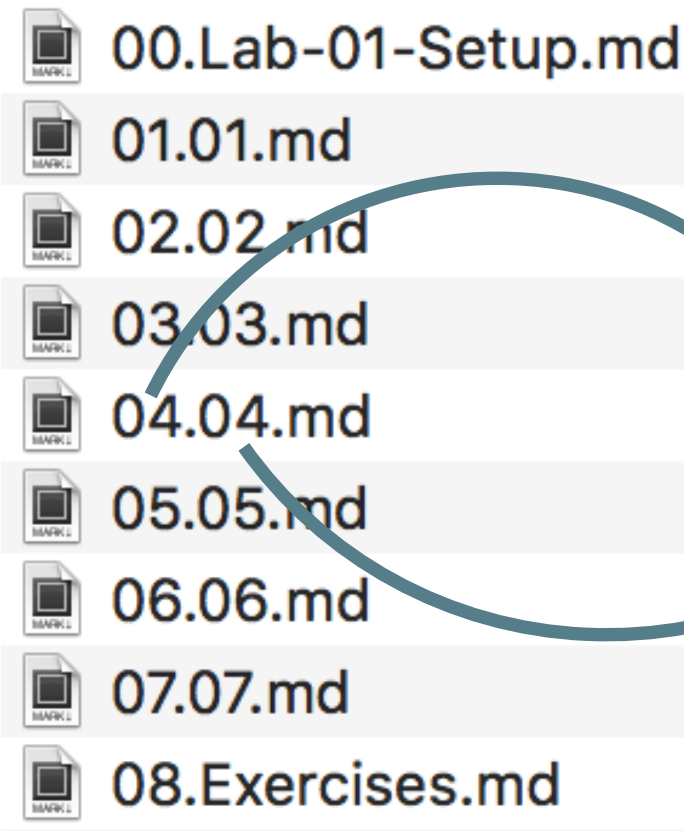
img

- images used in lab

archives

- zipped archive linked to in labs

lab menu bar



XX.YY.md

XX

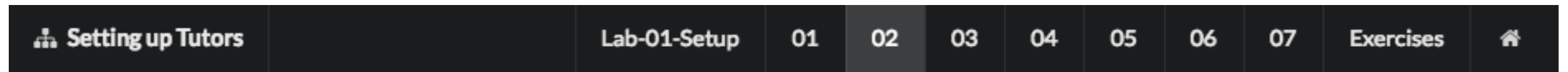
- must be a 2 digit number

YY

- can be any string

.md

- must me *.md*



Link to
TOC of
all labs

Link to
Parent
Topic

First step,
includes
lab name

YY is used as
step name in
the menubar

Link to
course
home page