

Functional Programming

Introduction to module

Produced
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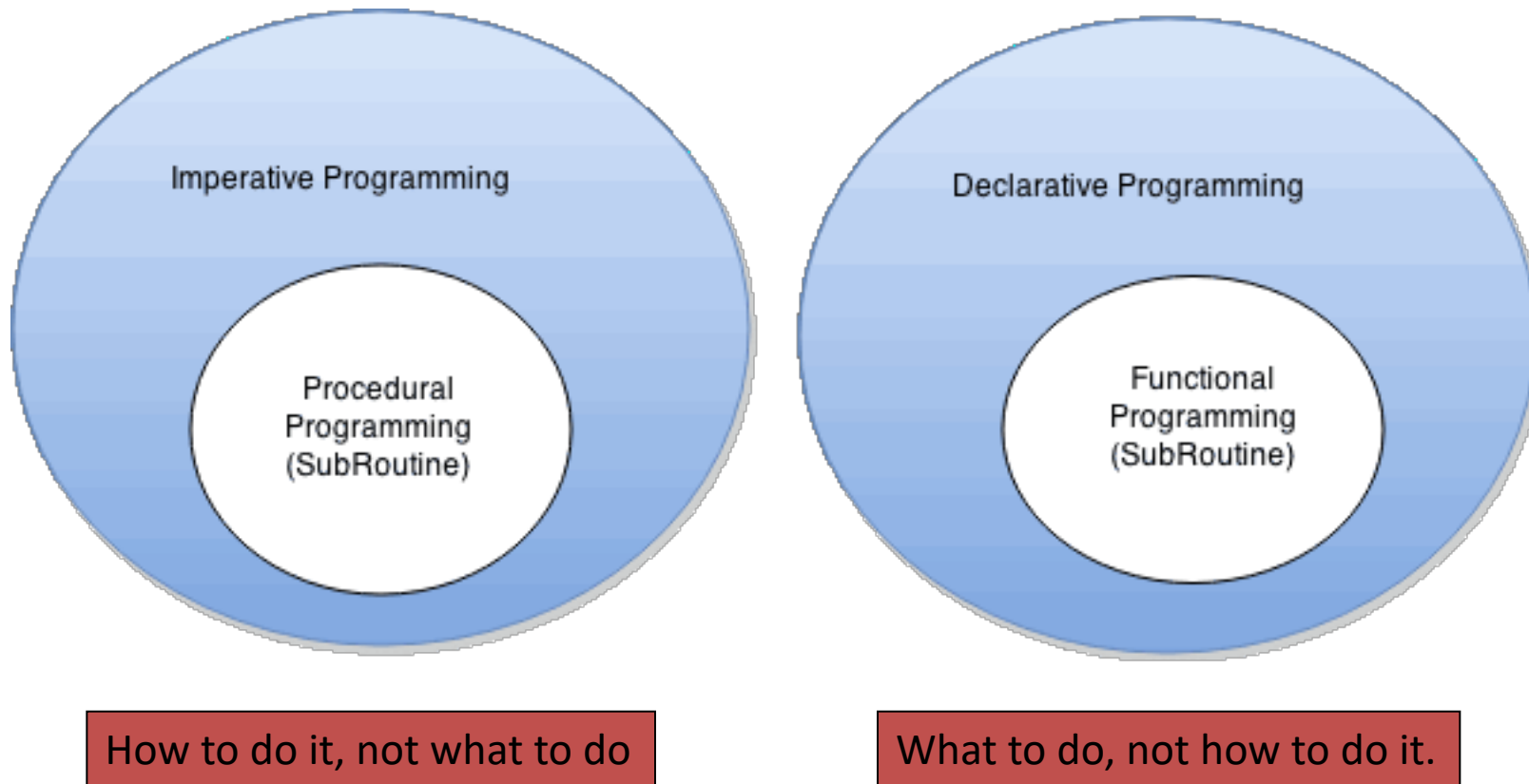
Agenda

- **Why Functional Programming**
- **Overview of course**
- **Overview of Assessment**

Why Functional Programming

- **A different way to think and think about programming and solving problems.**
- **A great way to get good at recursion**
- **A lot of companies are using it..**

What's different from what you've seen



What's different from what you've seen

Explain to your friend : What is an
orange peanut?
(He only knows brown peanuts)

Imperative

How to do it, not what to do

That brown peanut you have :
Paint it orange.
That's what an orange peanut
is.

Functional

What to do, not how to do it.

That brown peanut that you have:
If you had another peanut that's
just like it in every way except that
it's orange.
That's what an orange peanut is.

Differences

Imperative

Functional

Loops

No loops !!!

Variables – use them for e.g.
accumulating values

Variables cannot be changed
(immutability)

If [condition]
then [command]
else [command]

If [condition]
then [value]
else [value]

More later

So how will we approach this module?

- 14 weeks (12 weeks of tuition)
- 4 hours per week
- Each topic will have associated with it:
 - Lecture/s
 - Labs
- Each hour contact where we have either
 - lecture OR
 - Labs practising :
 - Techniques we have seen in lectures
 - Going through pre-defined sets of exercises online.



Breakdown of Assessment

SEMESTER 1		M	T	W	T	F						
JAN	WEEK							JAN	Formative Assignment	Summative Assignment	Weight	
	1	15	16	17	18	19						
	2	22	26	27	28	28						
FEB	3	29	1	2	3	4		FEB				
	4	5	6	7	8	9				ghci in-class	5%	
READING							READING					
	5	19	20	21	15	16						
MAR	6	26	27	28	29	29		MAR				
	7	4	5	6	7	8				Stack in-class lab test	5%	
	8	11	12	13	14	15				Programming Assignment	40%	
									First phase of Programming Assignment			
	9	18	19	20	21	22						
APR	EASTER 1	25	26	27	28	29		APR				
	EASTER 2	1	2	3	4	5						
	10	8	9	10	11	12						
	11	15	16	17	18	19						
	12	22	23	1	2	2						
	READING	29	30	31	32							
MAY	READING	5	6	7	8			MAY		Final Exam	50%	

Ethos of Module

- Practice, practice, practice,



- Engagement - ask questions,



- Work submitted must be your own,

- Help me to help you.

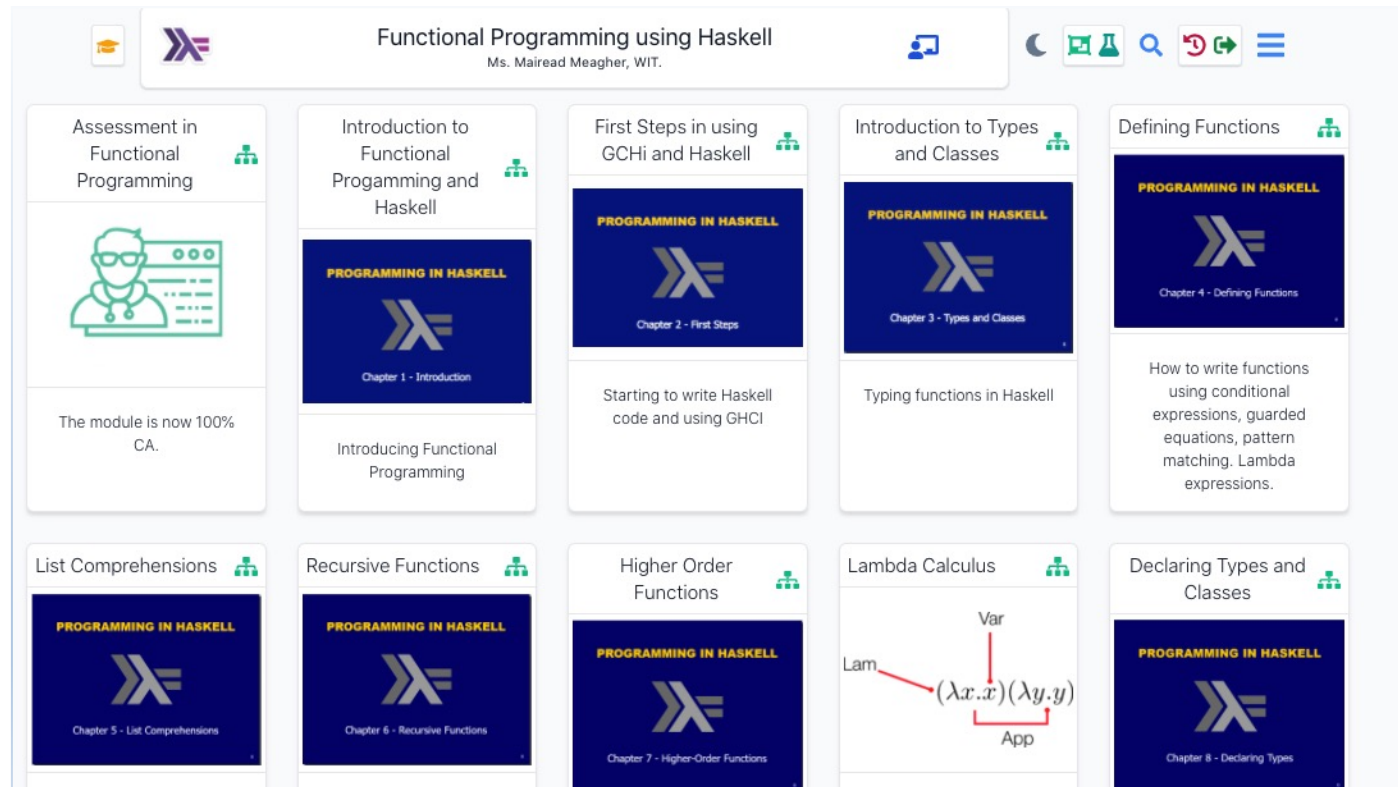


Brief Overview of Course

We will use

- Moodle - used for linking the current week's content to the appropriate topic from the tutors course
- Tutors (where course material is curated)
- Slack for communication within the group and to me. This will be the main channel for communication

Brief Overview of Course - tutors



<https://tutors.dev/course/fun-prog-24>

Any questions?

Contact Me



Preferably the Slack channel

Or

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