

Image Register

Chapter: Where Do I Even Start With Pair Programming in My Classroom? A Conversation With Seasoned Practitioners

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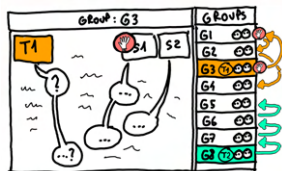


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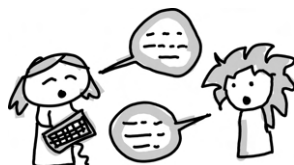


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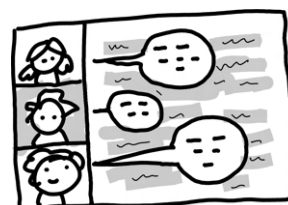


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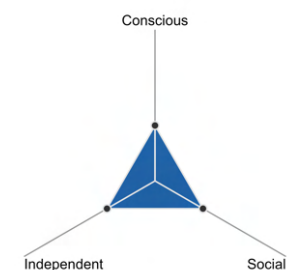


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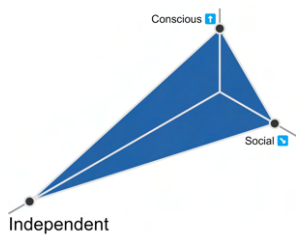


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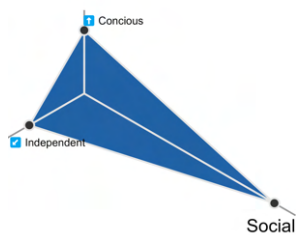


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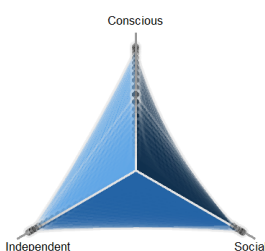


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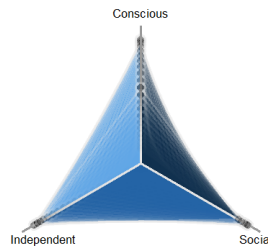


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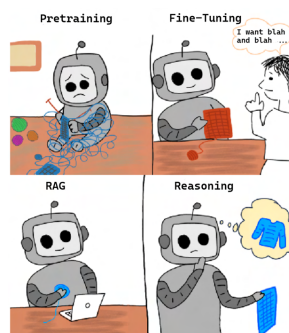
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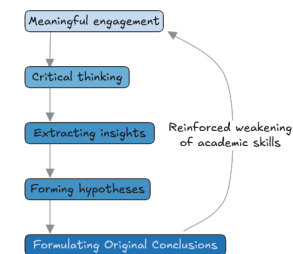
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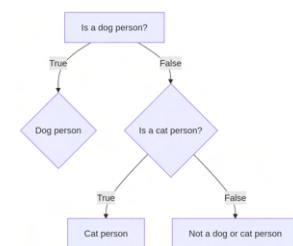


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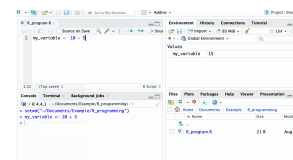


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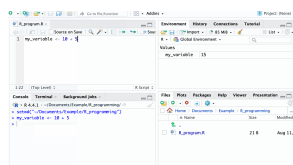


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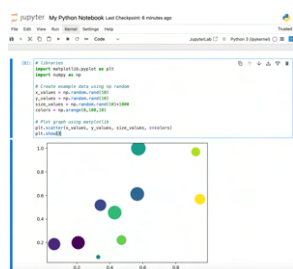


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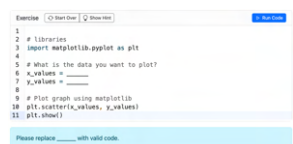
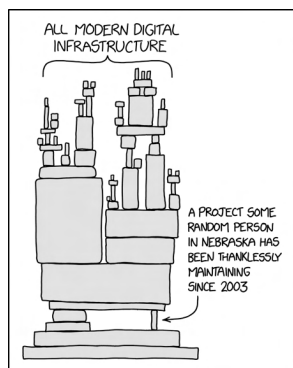


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Chapter: Practices To Foster Inclusion and Accessibility in Programming Teaching

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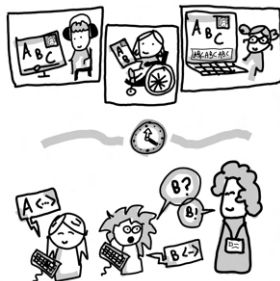


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Chapter: Overcoming Coding Anxiety: Lowering the Stakes and Making It Fun

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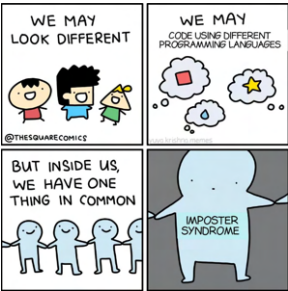


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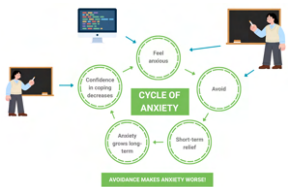


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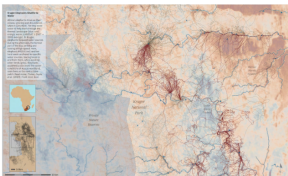


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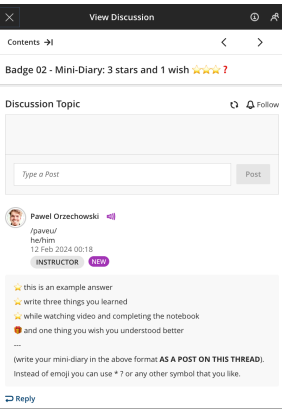
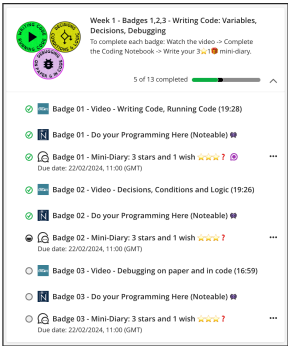


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Chapter: Peer Programming in Action: Pair Programming in Larger Groups

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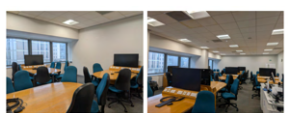
Semester 1			Semester 2		
Block 1	Week 1	Week 2	Block 1	Week 1	Week 2
	Week 3	Week 4		Week 3	Week 4
	Week 5			Week 5	
Break	Formative Feedback		Break	Formative Feedback	
Block 2	Week 7	Week 8	Block 2	Week 7	Week 8
	Week 9	Week 10		Week 9	Week 10
Break	Formative Feedback		Break	Summative Feedback	

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Chapter: Leveraging the Heterogeneity: Teaching Computing

Skills to a Multidisciplinary Cohort With a Variable Skill Level

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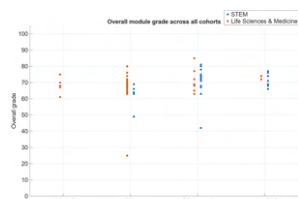
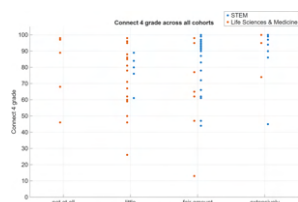


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Chapter: Learning Together Across Modes: Online and On-Site Pair Programming in a Fusion Course

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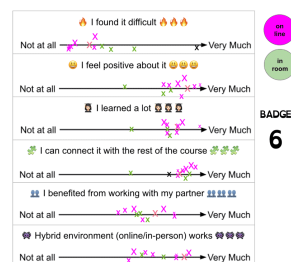


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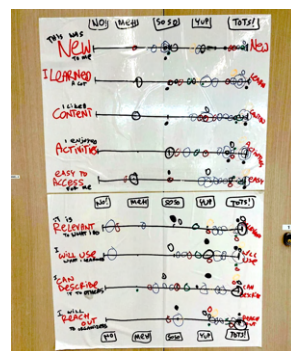


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Chapter: Notebook for Novices? Pros and Cons of Jupyter

Figure 22.1

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Creator: Joseph El Gemayel

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```
[1]: # "Hello, world!" first application in Jupyter
print("Hello, world!")
Hello, world!
```

Figure 22.2

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Creator: Joseph El Gemayel

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```
[1]: # Cell 1: Create a list
numbers = [1, 2, 3, 4, 5]

[2]: # Cell 2: Define a function
def square_list(values):
    return [x**2 for x in values]

[3]: # Cell 3: Call the function
print(square_list(numbers))
[1, 4, 9, 16, 25]
```

Figure 22.3

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Creator: Joseph El Gemayel

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```
[1]: import numpy as np

# Create an array of numbers
numbers = np.array([1, 2, 3, 4, 5])

# Square each number
squared = np.square(numbers)

# Calculate the mean
mean_value = np.mean(squared)

print("Numbers:", numbers)
print("Squared:", squared)
print("Mean of squared numbers:", mean_value)
Numbers: [1 2 3 4 5]
Squared: [1 4 9 16 25]
Mean of squared numbers: 11.0
```

Figure 22.4

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Creator: William Bell

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```
[*] In [ ]: spin on
dict_values = {}
print(dict_values["No such value"])
No such value
Automatic pub calling has been turned ON

KeyboardInterrupt: Traceback (most recent call last):
  Cell In [ ], line 3
    1 get_ipython().run_line_magic('pdb', 'on')
    2 dict_values = {}
    3 print(dict_values["No such value"])
    4 get_ipython().run_line_magic('pdb', 'var')
KeyboardInterrupt: No such value
> c:\users\...\.ipykernel\3611\37092000.py(3):module()
ipdb [ ]: For history, search history with C-Shift
```

Figure 22.5

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Creator: William Bell

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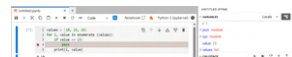
Python 3 (ipykernel)

Figure 22.6

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Chapter: Removing Barriers by Programming Without Computers

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Creator: David Cutting

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Chapter: Practical Approaches to Using Sound and Music in Programming Pedagogy

Figure 26.1

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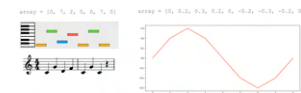


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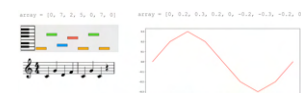


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```
python-functions-fade
├── functions.ipynb
├── guitar.wav
├── synth.wav
├── piano.wav
├── wav_library.py
├── gestural-instruments
├── max/Handshake_rnbo_patch1.maxpat
├── web
├── export/
├── img/
├── index.html
├── js
├── app.js
├── draw.js
├── guardrails.js
├── ssl/
├── style/
├── guide-to-wave-format
├── functions.ipynb
├── ipynb_audio_interactivity.ipynb
├── iteration.ipynb
├── wav_files.ipynb
├── wav_library
├── c/ c++/ java/ python/ rust/
├── wav_library.py
├── python-piano
├── pianopiece_assignment.ipynb
├── pianopiece_learning.ipynb
├── strudel-drum-patterns/index.html
```

Figure 26.3

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Creator: Matthew Hamilton

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```
15 Adding chords
[4]: # Create a chord with multiple notes at the same time
chords = [24, 25, 26]

# We can use the square brackets to define a "list"
chords = [24, 25, 26]

# A list call returns a chord from midnote
mid_note(chords)

# A chord with four notes
chords = [random.randint(30, 40), random.randint(30, 40), random.randint(30, 40), random.randint(30, 40)]

# Play the first chord again
mid_note(chords, length=1)

# Print notes
print(chords)
```

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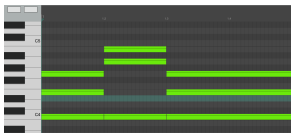


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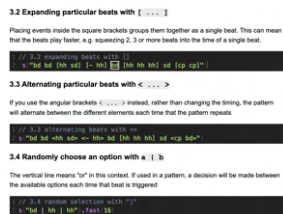


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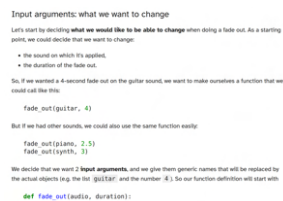


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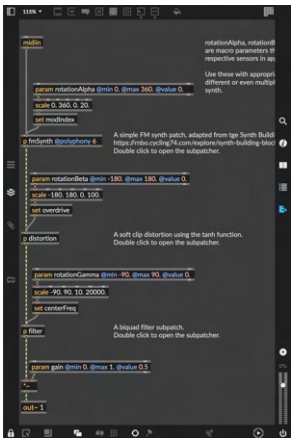


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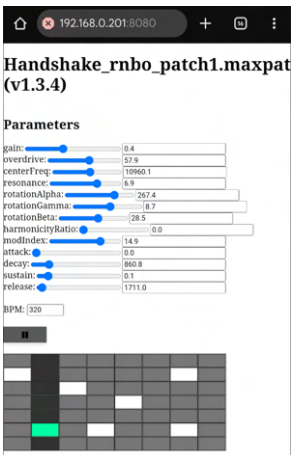
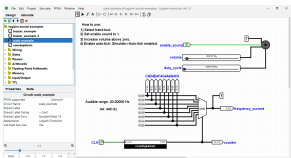


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Chapter: Seeing Before Coding, Doodling Before Doing: How Teaching Data Visualisation

Transforms the Way Students Think

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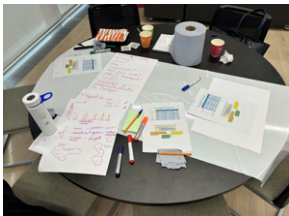


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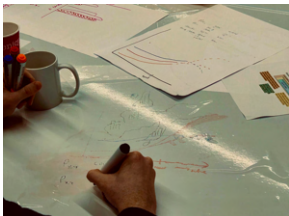


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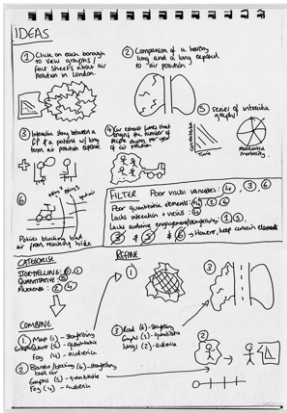


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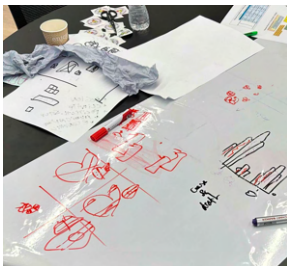


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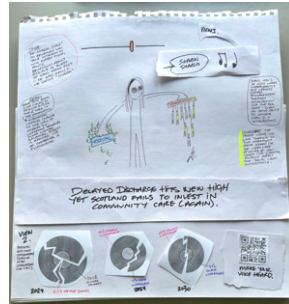
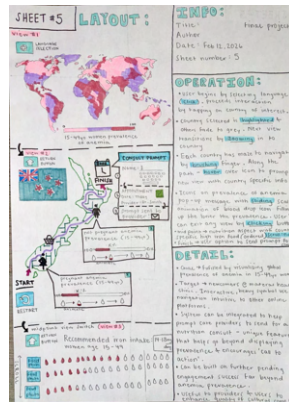


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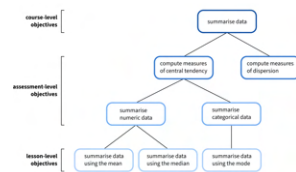
Chapter: Developing a Skills-Based Framework for Assessments in Programming Courses

Figure 30.1

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Chapter: Managing the Rubik's Cube of Assessment: The Action Feedback Protocol

Figure 31.1

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Chapter: Using Automated Marking in Programming Courses To Enhance Learning

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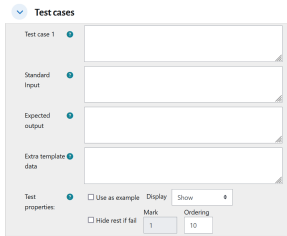


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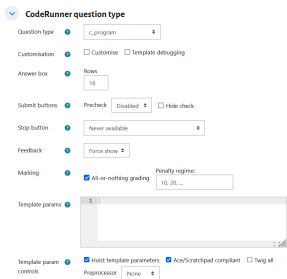


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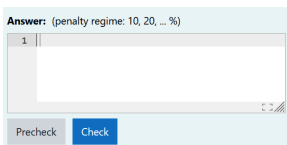
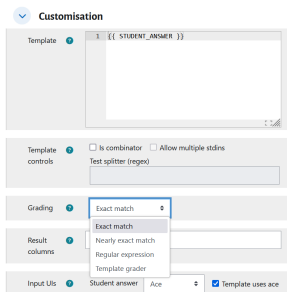


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Chapter: A Gentle Introduction to Coding: Narratives From a Programming Summer School for Social Sciences and Humanities

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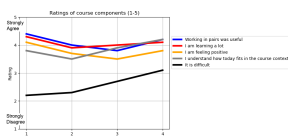


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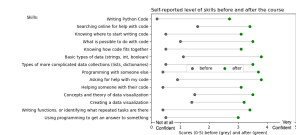


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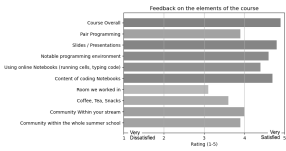


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Chapter: Case Study From Scotland s Rural College: The Wild(Life) Side of Pair Programming

Figure 37.1

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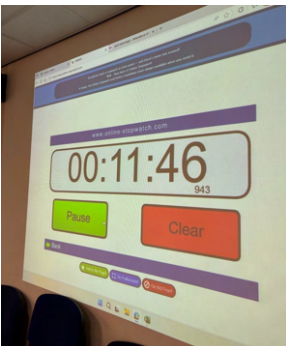


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Chapter: Changing Civil Engineering Students Mindset Toward Programming

Figure 39.1

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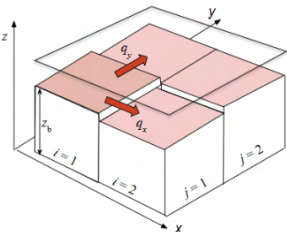


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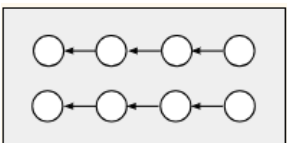
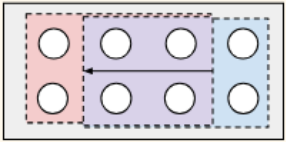


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Chapter: Lost in Translation: Complexities and Good Practices of Translating Coding- Based Teaching Materials Across Multiple Human Languages

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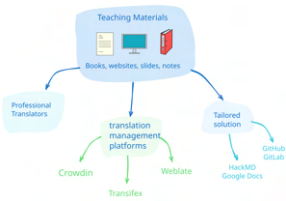


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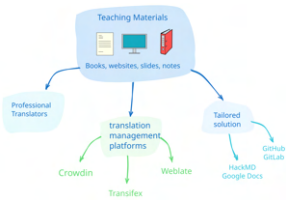


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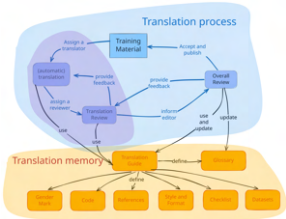


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