# **Journey refactor**

2022 - 2023



# **Journey refactor**

Refactoring the user experience of a study curriculum platform for a coding school involved improving the usability, accessibility, and overall user experience of the platform.

	📀 Journey 🛛 F	Projects	Review	Curr
F	Programming Basic	s - Python	~ >	Int
	Week Pair 2		>	Stor
C	Milestone 1		>	Your firs
	Week Pair 3		>	ask you Educati
	Week Pair 4		>	Please
(	Milestone 2		>	picture
	Week Pair 5 Week Pair 6		>	Later or covered
	Week Pair 6		>	
	Milestone 3		>	Wł
V	Veb and SQL - Pyth	on Flask	>	•
C	OOP - Java		>	
C	OOP - C#		>	Tasl
A	dvanced - Java Spi	ring	>	Introdu
A	dvanced - ASP.NET		>	Finis
A	dvanced - Android		>	•

 $_{\text{menu}} \equiv$ 

0

#### 🔷 Journey MENU 🔷 Journey MENU = 🔷 Journey MENU **=** 🔷 Journey Introduction to Python Introduction to Python 🕁 Introduction to Python ☆ Introduction to Python ☆ $\stackrel{}{\leftrightarrow}$ Type: Solo Type: Solo Story Type: Solo Type: Solo Waiting for review Waiting for review Your first task iliar with Python programming language. We'd like to ask you to cor torial provided by Educative. You can register for Educative for free. of this great in Waiting for review Waiting for review Ratings (1) Ratings (1) Difficulty: \_ = = = = 3.0 Usefulness: \* \* \* \* \* 3.0 segment (like Data Types and Variables) Difficulty: Ratings (1) Ratings (1) Enjoyability: \* \* \* \* \* 4.0 Materials: \* \* \* \* \* 4.0 Later on, feel free to continue with this tutoria Educative. Difficulty: Usefulness: \* \* \* \* \* 3.0 Difficulty: Enjoyability: \* \* \* \* \* 4.0 Usefulness: \* \* \* \* \* 3.0 Usefulness: \* \* \* \* \* 3.0 Story Materials: \* \* \* \* \* 4.0 Enjoyability: 🗙 \star \star 🚖 4.0 Enjoyability: \* \* \* \* \* 4.0 What are you going to learn? Your first task is to get familiar with Python progr Materials: \* \* \* \* \* 4.0 Materials: \* \* \* \* \* 4.0 ask you to complete some parts of this great inter Educative. You can register for Educative for free. The basics elem The basic synta Story Story victure about ır first task is to get familiar Tasks What are you going to learn? OPEN REPOSITORY

0	Journey	Projects	Review	Curriculum
Pro	gramming Ba Week Pair 1	sics - Python	× >	Introd
0	Week Pair 2		>	Story
	Milestone 1		>	Your first task is
0	Week Pair 3		>	ask you to com Educative. You
0	Week Pair 4		>	Please read and
0	Milestone 2		>	picture about e
0-0-0-0	Week Pair 5		>	Later on, feel fr covered by this
0	Week Pair 6		>	
0	Milestone 3		>	What a
We	b and SQL - Py	thon Flask/	>	<ul> <li>The base</li> <li>The base</li> </ul>
00	P - Java		>	
00	P - C#		>	Tasks
٨d	anced - Java	Spring	>	
٨d	anced - ASP.N	IET	>	Introduction
Adv	anced - Andro	aid	>	Finish the I
nut	Andre Andre			The str

## troduction to Python ☆

### ry

rst task is to get familiar with Python programming language. We'd like to ou to complete some parts of this great interactive tutorial provided by tive. You can register for Educative for free.

read and complete the first three sections (until Functions), and upload a e about every finished segment (like Data Types and Variables).

on, feel free to continue with this tutorial when you encounter topics that are ed by this course on Educative.

### hat are you going to learn?

The basics elements of Python. The basic syntax.

### ks

### luction

ish the Introduction section in the course.

The student finished the Introduction section and uploaded a picture

Feedback Account ~	G	Sourney Projects Re	eview	Curriculum Feedback Account ~	•
luction to Python 🛠	OPEN REPOSITORY	Programming Basics - Python Week Pair 1	~ >	Introduction to Python 🛠	OPEN REPOSITORY
	Type: Solo	Week Pair 2	>	Story	Type: Solo
s to get familiar with Python programming language. We'd like to plete some parts of this great interactive tutorial provided by	Waiting for review	<ul> <li>Milestone 1</li> <li>Week Pair 3</li> </ul>	> >	Your first task is to get familiar with Python programming language. We'd like to ask you to complete some parts of this great interactive tutorial provided by Educative. You can register for Educative for free.	Waiting for review
can register for Educative for free. d complete the first three sections (until Functions), and upload a	Ratings (1)	Week Pair 4	>	For Educative for Iree. Please read and complete the first three sections (until Functions), and upload a picture about	Ratings (1)
e complete the first three sections (until Functions), and upload a every finished segment (like Data Types and Variables).	Difficulty: 3.0	Milestone 2	\$	Please read and complete the first three sections (until Functions), and upload a picture about every finished segment (like Data Types and Variables).	Difficulty: 3.0
ee to continue with this tutorial when you encounter topics that are	Usefulness: ***** <b>3.0</b> Enjovability: ***** <b>4.0</b>	Week Pair 5	>	Later on, feel free to continue with this tutorial when you encounter topics that are covered by	Usefulness: * * * * * 3.0 Enjoyability: * * * * * 4.0
: course on Educative.	Materials: ****4.0	Week Pair 6	>	this course on Educative.	Materials: ***** 4.0
re you going to learn?		Milestone 3	>	What are you going to learn?	
sics elements of Python. sic syntax.		Web and SQL - Python Flask	>	<ul><li>The basics elements of Python.</li><li>The basic syntax.</li></ul>	
		OOP - Java	>		
		OOP - C#	>	Tasks	
		Advanced - Java Spring	>	Introduction	
		Advanced - ASP.NET	>	Finish the Introduction section in the course.	
ntroduction section in the course.	<b>2</b>	Advanced - Android	>		
udent finished the Introduction section and uploaded a picture		Advanced - PHP	>	<ul> <li>The student finished the Introduction section and uploaded a picture about it.</li> </ul>	
		Advanced - DevOps	>	Data Types and Variables	

Ratings (1) Difficulty: 3.0 Usefulness: **** 3.0 Enjoyability: **** 4.0	Waiting for review Ratings (1) Difficulty: 3.0 Usefulness: **** 3.0 Enjoyability: **** 4.0	OPEN RE	POSITORY	
Waiting for review Ratings (1) Difficulty: 3.0 Usefulness: **** 3.0 Enjoyability: **** 4.0	Waiting for review Ratings (1)	Type: Solo		
Ratings (1) Difficulty: 3.0 Usefulness: *****3.0 Enjoyability: *****4.0	Ratings (1) Difficulty: 3.0 Usefulness: *****3.0 Enjoyability: *****4.0			
Difficulty: <b>3.0</b> Usefulness: <b>*****3.0</b> Enjoyability: <b>*****4.0</b>	Difficulty: <b>3.0</b> Usefulness: <b>*****3.0</b> Enjoyability: <b>*****4.0</b>	Naiting for	review	
Difficulty: <b>3.0</b> Usefulness: <b>**** 3.0</b> Enjoyability: <b>**** 4.0</b>	Difficulty: <b>3.0</b> Usefulness: <b>**** 3.0</b> Enjoyability: <b>**** 4.0</b>	Detings (1)		
Usefulness: <b>*****3.0</b> Enjoyability: <b>*****</b> 4.0	Usefulness: <b>*****3.0</b> Enjoyability: <b>*****4.0</b>			
Enjoyability: ★★★★★ <b>4.0</b>	Enjoyability: ★★★★★ <b>4.0</b>			
Materials: <b>****4.0</b>	Materials: ***** <b>4.0</b>			

# **Journey refactor**

# Q1 Discovery & concept

### 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

TOOLS: GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, COMPETITOR ANALYSIS

## 2. Conceptualisation & clarification

Design thinking methods were applied to familiarize with the users. Customer experience mapping and card sorting helped build the basics of IA. Vision spikes were created along the top priority feature requests.

TOOLS:	
DESIGN THINKING, CARD SORTING,	
INFORMATION ARCHITECTURE, USER STORIES,	
USER FLOWS, VISION SPIKES	

### 3. Navigation

The interface intuitive and was declutter optimized.

TOOLS: WIREFRAMING, PR DESIGN SYSTEM B TESTING, BEST PR

## Q2-Q3 Declutter & stabilize

on and layout	4. XP system basics
e was simplified to make it d easy to use. Navigation ered, and the layout was	An experience point-based system was developed to help students and their mentors oversee the student's progress.
	TOOLS:
ROTOTYPING, BREAKPOINTS &	WIREFRAMING, PROTOTYPING,
BASICS, USABILITY	ATOMIC DESIGN SYSTEM, USABILITY TESTING,
RACTICE RESEARCH	BENCHMARKING (NPS, SATISCACTION SURVEYS)

# **Journey refactor**

## **Q1** Discovery & concept

### 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

**TOOLS:** GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, **COMPETITOR ANALYSIS** 

## 2. Conceptualisation & clarification

Design thinking methods were applied to familiarize with the users. Customer experience mapping and card sorting helped build the basics of IA. Vision spikes were created along the top priority feature requests.

TOOLS:	
DESIGN THINKING, CARD SORTING,	
INFORMATION ARCHITECTURE, USER STORIES,	
USER FLOWS, VISION SPIKES	

## 3. Navigation and layout

The interface was simplified to make it intuitive and easy to use. Navigation was decluttered, and the layout was optimized.

TOOLS: WIREFRAMING, PR **DESIGN SYSTEM B** TESTING, BEST PRA

## Q2-Q3 Declutter & stabilize

### 4. XP system basics

An experience point-based system was developed to help students and their mentors oversee the student's progress.

	TOOLS:
ROTOTYPING, BREAKPOINTS &	WIREFRAMING, PROTOTYPING,
BASICS, USABILITY	ATOMIC DESIGN SYSTEM, USABILITY TESTING,
RACTICE RESEARCH	BENCHMARKING (NPS, SATISCACTION SURVEYS)

# **Journey refactor**

## Q4 Gamification

## 5. Interactive content

The learning experience was enhanced by providing interactive and engaging learning materials such as coding challenges, quizzes, and video tutorials. By completing each, users could collect XPs.

## 6. Advancement logic & feed

By collecting XPs, users could unlock the upcoming units and acquire additional help and tutoring from mentors.

## Q1 Iterate & Illustrate

## 7. Theme creation

A theme was created to put the students progress into context which helped them understand where is programming used in the real world. (Discovery of industries concept)

TOOLS:
COMPETITOR ANALYSIS, BEST PRACTICE RESEARCH,
WIREFRAMING, PROTOTYPING, DESIGN SYSTEM,
USABILITY TESTING

TOOLS:	
DESIGN THINKING, CARD SORTING,	
NFORMATION ARCHITECTURE, USER STORIES,	
USER FLOWS, VISION SPIKES	

TOOLS: WIREFRAMING, PROTOTYPING, DESIGN SYSTEM, USABILITY TESTING, MIDJOURNEY

## 8. Chat GPT & Chatbot

The curriculum's content got refactored with the help of Chat GPT to fix grammatical and stylistic errors. A chatbot was planned to be implemented to help answer the frequently asked questions.

### TOOLS:

CHAT GPT CONTENT REFACTOR, CHATBOT INTEGRATION, WIREFRAMING, PROTOTYPING

# **Journey refactor**

## Q4 Gamification

## 5. Interactive content

The learning experience was enhanced by providing interactive and engaging learning materials such as coding challenges, quizzes, and video tutorials. By completing each, users could collect XPs.

## 6. Advancement logic & feed

By collecting XPs, users could unlock the upcoming units and acquire additional help and tutoring from mentors.

## **Q1** Iterate & Illustrate

## 7. Theme creation

A theme was created to put the students progress into context which helped them understand where is programming used in the real world. (Discovery of industries concept)

TOOLS:
COMPETITOR ANALYSIS, BEST PRACTICE RESEARCH,
WIREFRAMING, PROTOTYPING, DESIGN SYSTEM,
USABILITY TESTING

TOOLS:
DESIGN THINKING, CARD SORTING,
NFORMATION ARCHITECTURE, USER STORIES,
USER FLOWS, VISION SPIKES

TOOLS: WIREFRAMING, PROTOTYPING, **DESIGN SYSTEM, USABILITY TESTING, MIDJOURNEY** 

## 8. Chat GPT & Chatbot

The curriculum's content got refactored with the help of Chat GPT to fix grammatical and stylistic errors. A chatbot was planned to be implemented to help answer the frequently asked questions.

### TOOLS:

CHAT GPT CONTENT REFACTOR, CHATBOT INTEGRATION, WIREFRAMING, PROTOTYPING

# Journey refactor

## 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

TOOLS:

GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, COMPETITOR ANALYSIS

## Personas (briefly)



## Alex: The Career Changer

Alex is a 32-year-old marketing professional who has always been interested in technology and coding. They want to transition to a career in tech and have decided to take courses at an online coding school to gain the skills they need.

## Maya: The Busy College Student

Maya is a 20-year-old college student studying computer science. She is already familiar with some coding concepts, but wants to deepen her knowledge and gain practical experience.



## David: The Lifelong Learner

David is a 50-year-old engineer who has been working in the oil industry for over 20 years. He wants to extend his knowledge within coding.

# **Journey refactor**

## 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

**TOOLS:** 

GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, **COMPETITOR ANALYSIS** 

## **CX** mapping - Lead generation

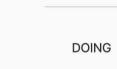




3 - Bachelors Busy Bee with baby (Beatrix, Beatrice)

4 - Career Changer Christine (Kriszta, Kristina, Cristina

Customer Type: Ideal / e • CEE (HU, RO, PL, AT) • High School graduate • Lost job • Lost job

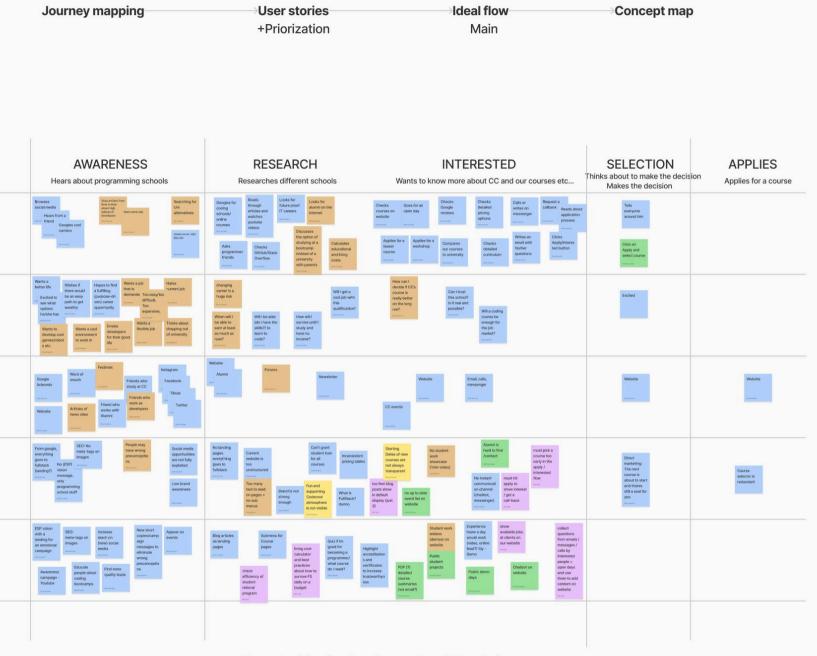


THINKING

TOUCHPOINT

WEAKNESSES mostly website related

OPPORTUNITIES nostly website related





Quiz if Im good for becoming a programmer/ what course do i need?

**Opportunities for development on CC website** 



# **Journey refactor**

## 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

**TOOLS:** 

GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, **COMPETITOR ANALYSIS** 

## **User stories:**

- challenges, so that I can learn by doing and practicing coding skills.
- need improvement.
- can ask questions and get help when needed.
- on-the-go and at my own pace.
- so that I can keep the content fresh and up-to-date.
- coding exercises, so that I can help them improve their skills.

1. As a student, I want to easily **find the unit I was in, and oversee my current progress** within the curriculum so I can continue my studies exactly where I left off.

2. As a student, I want to have access to high-quality video tutorials and interactive coding

3. As a student, I want to be able to track my progress and receive feedback on my coding exercises, so that I can identify my strengths and weaknesses and focus on areas that

4. As a student, I want to be able to connect with other students and instructors, so that I

5. As a student, I want to be able to access the platform from any device, so that I can learn

6. As a mentor, I want to be able to easily create and publish new courses and learning paths,

7. As a mentor, I want to be able to monitor student progress and provide feedback on their

8. As an administrator, I want to be able to manage student accounts and track their progress, so that I can identify any issues and provide support when needed.

9. As an administrator, I want to be able to monitor platform usage and track key performance metrics, so that I can make data-driven decisions to improve the platform.

# **Journey refactor**

## 1. Discovery

The current user experience was analyzed comprehensively to identify its strengths and weaknesses. Feedback was gathered from users to understand their likes and dislikes about it.

**TOOLS:** 

GOOGLE ANALYTICS, HOTJAR, SHADOWING, USER INTERVIEWS, NIELSEN'S HEURISTICS, **COMPETITOR ANALYSIS** 

## **Usability heuristics:**

- disrupted the learning experience and frustrated the user.
- some students to access the content and complete assignments.
- motivation.
- level, they became disengaged and lost interest in the platform.
- get the help they needed and led to frustration and disengagement.

1. **Technical issues**, such as slow loading times, broken links, or software malfunctions,

2. Accessibility issues, such as difficulty navigating the platform, issues with screen readers or other assistive technologies, or inaccessible content, made it difficult or impossible for

3. Poor user experience resulted from a poorly designed platform that made it difficult for users to find the information they needed, navigate the content, or understand the instructions. This led to confusion, frustration, and decreased engagement.

4. Insufficient feedback was frustrating and demotivating for users who needed feedback to improve their coding skills. If the platform didn't provide enough feedback on coding exercises or progress tracking, users felt like they weren't making progress and lost

5. Ineffective content, such as poorly structured or outdated content, led to a lack of engagement and interest from users. If the content didn't match the user's needs or skill

6. Communication issues, such as a lack of communication between students and instructors, made users feel isolated and unsupported. This made it difficult for users to

# **Journey refactor**

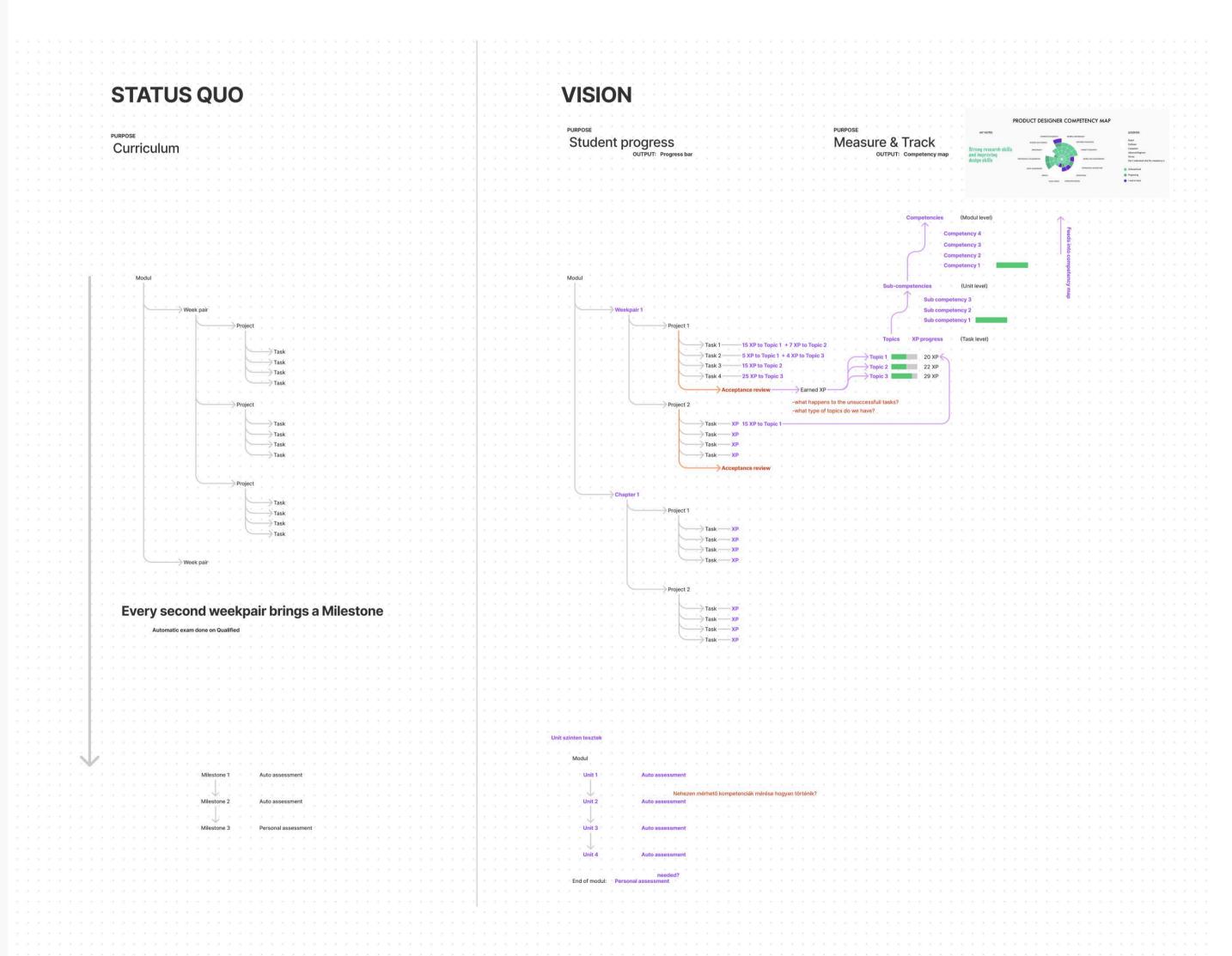
## 2. Conceptualisation

Design thinking methods were applied to familiarize with the users. Customer experience mapping and card sorting helped build the basics of IA. Vision spikes were created along the top priority feature requests.

TOOLS:

DESIGN THINKING, CARD SORTING, INFORMATION ARCHITECTURE, USER STORIES, USER FLOWS, VISION SPIKES

## Information architecture



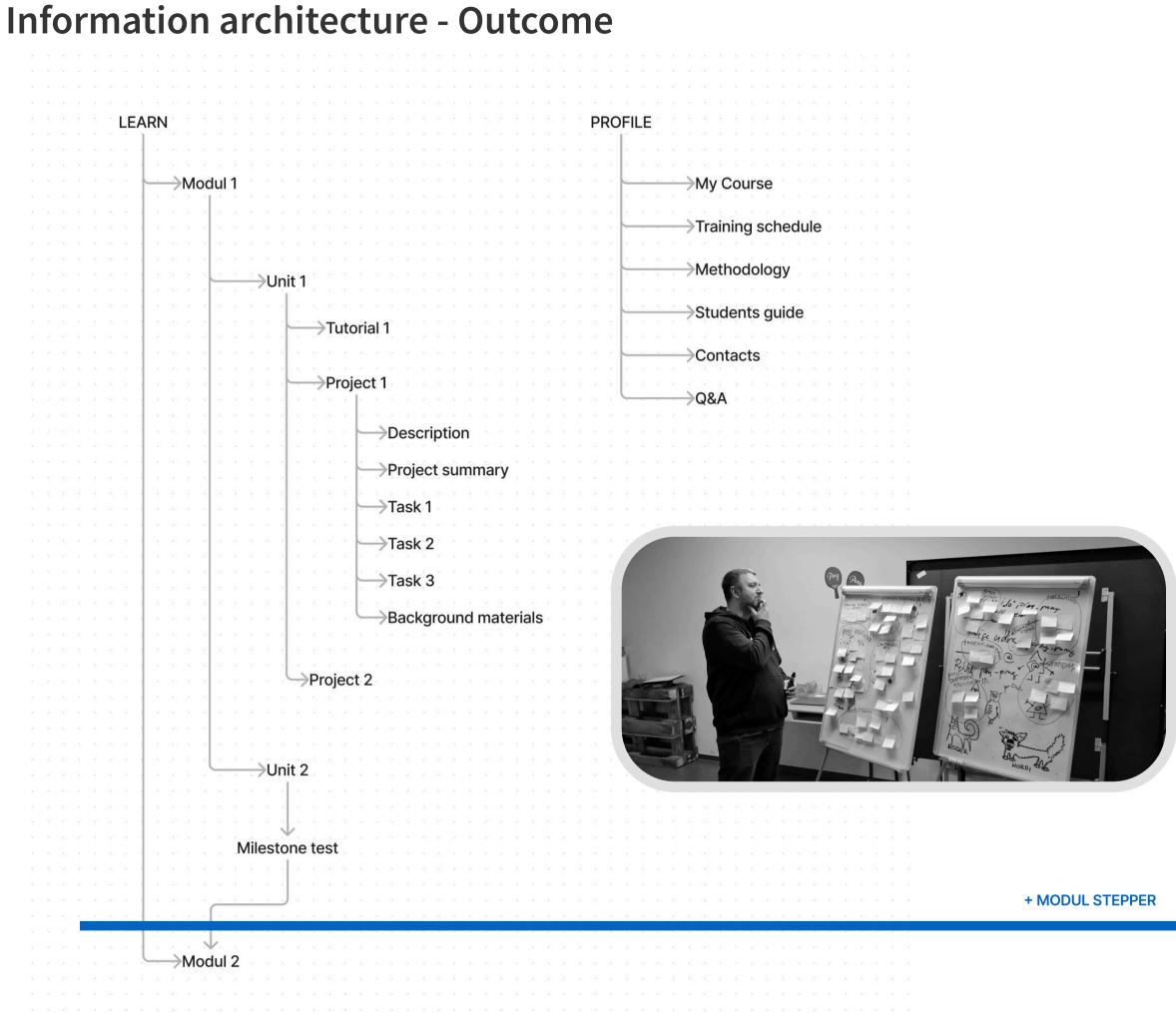
# **Journey refactor**

## 2. Conceptualisation

Design thinking methods were applied to familiarize with the users. Customer experience mapping and card sorting helped build the basics of IA. Vision spikes were created along the top priority feature requests.

**TOOLS:** 

DESIGN THINKING, CARD SORTING, INFORMATION ARCHITECTURE, USER STORIES, USER FLOWS, VISION SPIKES



# **Journey refactor**

## 3. Navigation and layout

The interface was simplified to make it intuitive and easy to use. Navigation was decluttered, and the layout was optimized.

**TOOLS:** 

WIREFRAMING, PROTOTYPING, BREAKPOINTS & **DESIGN SYSTEM BASICS, USABILITY TESTING, BEST PRACTICE RESEARCH** 

Journey Projects Review	Curriculum Feedback Account ~
MODUL 1: PROGRAMMING BASICS IN PYTHON Week Pair 1 2/8	Hello World (guided)
Git Started	What does Git mean? It stands for "global information tracker": when you're in a good mood,
	and it actually works for you. Angels sing, and a light suddenly fills the room. Or "goddamn idiotic truckload of sh*t": when it breaks.
Introduction to Python start	This was actually a quote from Linus Torvalds, the creator of Linux and the Git version control system. Torvalds also said that since he is an egotistical bastard, he named this another child of his after himself, too: the word 'git' is British slang for 'an unpleasant or contemptible person'.
Hello World (guided)	Well. Cit does have a constation of being obscure and hard to use
Simple Calculator	We hope you'll find it not that hard. Git is just a tool created by developers for developers: while the UX is really poor, at the end of the day, Git is the Swiss Army knife of source code
Project Rewrite	management. The best strategy is to use it a lot, and we recommend you a good book to read about it later on.
Another project (optional)	All projects in Codecool are handled using Git, and this project covers the necessary basics of Git usage.
Another project (optional)	
Week Pair 2 0/5 🗸	What are you going to learn?
Tilestone 1	Clone a remote repository from GitHub. Add and modify files.
Week Pair 3 0/6 🗸	Create commits. Handle excluded files. Push the result back to the remote server.
Week Pair 4 0/7 🗸	This is what you need to do with every project in the future.
Milestone 2	
Week Pair 5 0/11 🗸	Tasks
Week Pair 6 0/4 🗸	Passwordless git with SSH
🍷 Personal Assesment	Set up passwordless git access on your computer and GitHub account by using SSH. This means that you use SSH (Secure Shell Protocol) to authenticate to GitHub instead of giving your username and password.
MODUL 2:	<ul> <li>Executing git configget remote.origin.url in shell on the repo shows a response that starts with: git@</li> </ul>
MODUL 3:	<ul> <li>Executing git fetch in shell on the repo does not ask for username and password.</li> </ul>
00P	Create GitHub repository
MODUL 4: V OOP	Set up passwordless git access on your computer and GitHub account by using SSH. This means that you use SSH (Secure Shell Protocol) to authenticate to GitHub instead of giving your username and password.
MODUL 5: V	
MODUL 6: OOP	

## Simple menu & modul stepper

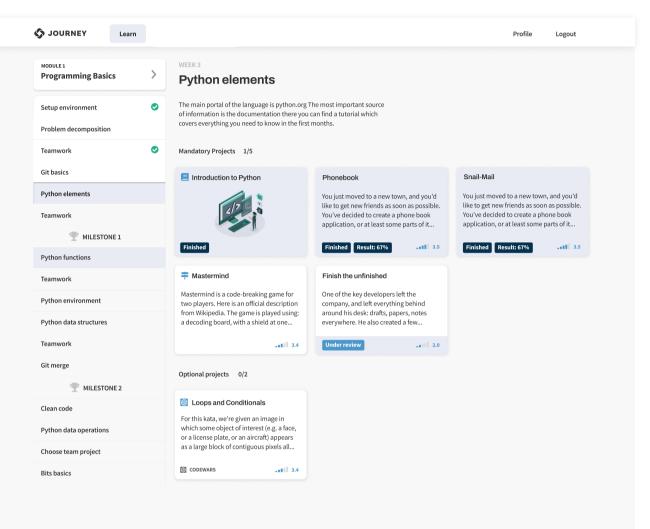
c
Leve
Туре

Rate this project

•

### : Elemental

Solo



 $\bigcirc$ 

# **Journey refactor**

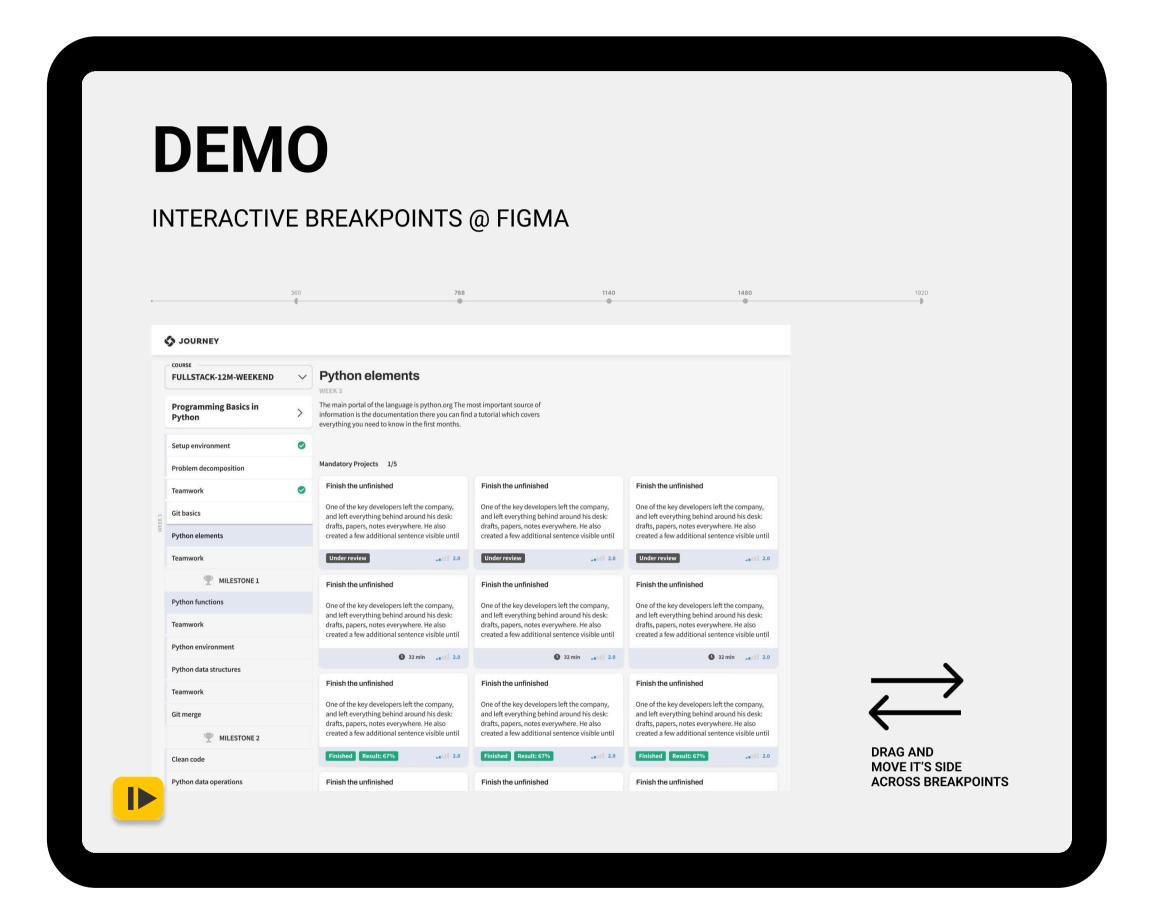
## 3. Navigation and layout

The interface was simplified to make it intuitive and easy to use. Navigation was decluttered, and the layout was optimized.

TOOLS:

WIREFRAMING, PROTOTYPING, BREAKPOINTS & DESIGN SYSTEM BASICS, USABILITY TESTING, BEST PRACTICE RESEARCH

## Card system



# **Journey refactor**

## 3. Navigation and layout

The interface was simplified to make it intuitive and easy to use. Navigation was decluttered, and the layout was optimized.

**TOOLS:** WIREFRAMING, PROTOTYPING, BREAKPOINTS & DESIGN SYSTEM BASICS, USABILITY **TESTING, BEST PRACTICE RESEARCH** 

## **Project flow**



### The Keymaker

Otto Reinier, the eccentric billionaire has recreational linguistics. He loves to play a and is eager to find patterns in texts. He library that can help him in his research. lot, so you decide to deal with anagrams See the grammatical definitions at "Hint

#### Tasks

Palindrome checker

Implement the is\_palindrome function Check the letters only. Upper or lower

1. A new Codepen is in Your Work tab 2. By opening your first codepen you

#### Palindrome checker

Implement the is\_palindrome function palindrome. Check the letters only. Up punctuation does not matter.

1. A new Codepen is in Your Work tab 2. By opening your first codepen you

#### Palindrome checker

Implement the is palindrome functio palindrome. Check the letters only. Up punctuation does not matter.

1. A new Codepen is in Your Work tab 2. By opening your first codepen you

#### Palindrome checker

Implement the is palindrome function palindrome. Check the letters only. Up punctuation does not matter.

1. A new Codepen is in Your Work tab 2. By opening your first codepen you

 $\bigcirc$ 

### Hints

- A palindrome is a word, number, phras reads the same backward as forward, https://en.wikipedia.org/wiki/Palindro
- An isogram (or heterogram) is a word of "cornflakes", "subdermatoglyphic". Se
- A pangram is a sentence or other sequ

		Profile	Logout
	GU	IDED 茾	
around with words hires you to write a • Practi	are you going to learn? ce string operations. we your algorithmic skills.		
n that checks whether a given input string is case, whitespace, and punctuation does not			
o on codepen.io can see an alert box with the text - JavaScrip	ot basics!		
n that checks whether a given input string is oper or lower case, whitespace, and			
o on codepen.io can see an alert box with the text - JavaScrip	ot basics!		
n that checks whether a given input string is oper or lower case, whitespace, and			
o on codepen.io can see an alert box with the text - JavaScrip	ot basics!		
n that checks whether a given input string is oper or lower case, whitespace, and			
o on codepen.io can see an alert box with the text - JavaScrip	ot basics!		
		♦	
se, or other sequence of characters which such as "rotator", "Anna", "My gym". See ome. or phrase without a repeating letter, such as se https://en.wikipedia.org/wiki/Isogram. sence of characters in which every letter of	Background mater List comprehensions Sets	ials	

### **PROJECT FLOW PROTO**

# **Journey refactor**

## 4. XP system basics

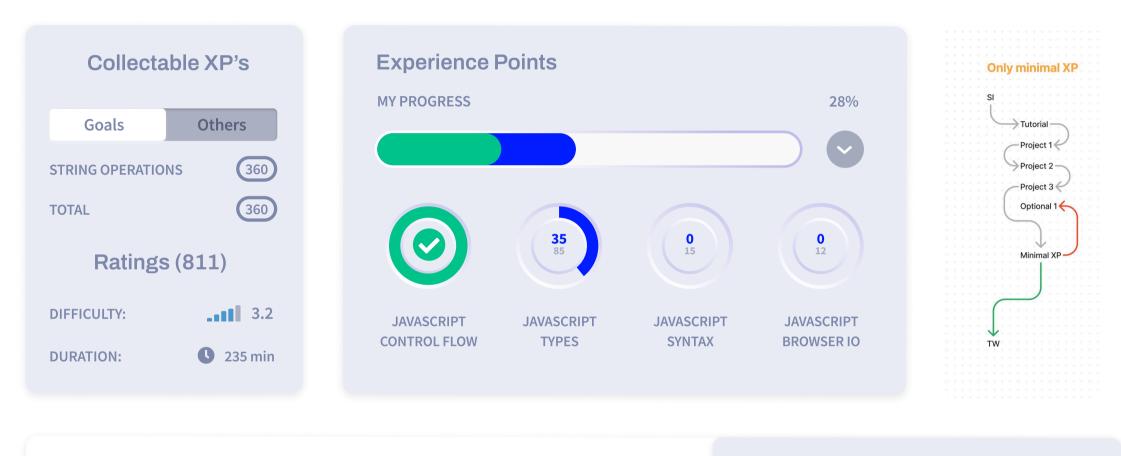
An experience point-based system was developed to help students and their mentors oversee the student's progress.

TOOLS:

WIREFRAMING, PROTOTYPING, ATOMIC DESIGN SYSTEM, USABILITY TESTING, BENCHMARKING (NPS, SATISCACTION SURVEYS)

## **XP System**

## CUSTOM ORGANISMS FOR XP SYSTEM



### Consultation

Once you have practiced enough, prepare your questions to clarify obstacles you came across in a live session with a mentor.



# **Journey refactor**

## 4. XP system basics

An experience point-based system was developed to help students and their mentors oversee the student's progress.

TOOLS: WIREFRAMING, PROTOTYPING, ATOMIC DESIGN SYSTEM, USABILITY TESTING, **BENCHMARKING (NPS, SATISCACTION SURVEYS)** 

## **XP System** LAYOUT

JOURNEY Learn		Profile Logout
Programming Basics in Python     >       MY PROGRESS ①     10%       I.0 Welcome to Codecool     :       2.0 Variables     :	Welcome to Codecool! This course aims to help you write the first you to the Codecool method. Our aim is to show you that coding re Go through this 5-10 hours long list of challenges and see it for you	eally is for everyone.
3.0 Arrays	Mandatory Projects 0/2	
4.0 Operators and Conditionals 5.0 Functions 5.0 Functions	<b>1.1 Welcome to the course</b> This course aims to help you write the first lines of code and introduce you to the Codecool method. You'll learn the basics of the JavaScript pro	1.2 The first steps This course aims to help you write the first lines of code and introduce you to the Codecool method. You'll learn the basics of the JavaScript pro
	START >	START >
	Optional Projects 0/2	
	<ul> <li>Get help</li> <li>Hi there, Are you feeling lost? Do you have some troubles with an assignment? We are here to help you! The onboarding course is supported by Cod</li> <li>START &gt; 235 min] 3.2</li> </ul>	





JOURNEY BY CODECOOL	Learn

#### 🚽 SEND TO REVIEW $\bigcirc$ OPEN REPOSI DOPEN REPO The Keymaker Experience Points (i) PROJECT GUIDED Goals Otto Reinier, the eccentric billionaire has a strange hobby: recreational linguistics. He loves to play around with words and is eager to 360 find patterns in texts. He hires you to write a library that can help him in his research. And... well, he pays a lot, so you decide to deal with anagrams and stuff for a while. See the grammatical definitions at "Hints". THON LIST OPERATIONS ONE CHARACTERS 360 Tasks Ratings (811) ✓ Palindrome checker 235 min DURATION: nent the is\_palindrome function that checks whether a given input string is palindrome Check the letters only. Upper or lower case, whitespace, and punctuation does not matter. **Background materials** 1. A new Codepen is in Your Work tab on codepen.io max and sort with using the key 2. By opening your first codepen you can see an alert box with the text - JavaScript basics! parameter list comprehension sequence packing and unpacking enumerate ✓ Palindrome checker ment the is\_palindrome function that checks whether a given input string is with statement (for reading files string formatting (f-strings or .format()) palindrome. Check the letters only. Upper or lower case, whitespace, and punctuation does not matter. 1. A new Codepen is in Your Work tab on codepen.io 2. By opening your first codepen you can see an alert box with the text - JavaScript basics! Palindrome checker Implement the is\_palindrome function that checks whether a given input string is palindrome. Check the letters only. Upper or lower case, whitespace, and punctuation does not matter. 1. A new Codepen is in Your Work tab on codepen.io 2. By opening your first codepen you can see an alert box with the text - JavaScript basics! Palindrome checker Implement the is\_palindrome function that checks whether a given input string is palindrome. Check the letters only. Upper or lower case, whitespace, and punctuation does not matter. A new Codepen is in Your Work tab on codepen.io By opening your first codepen you can see an alert box with the text - JavaScript basics! Hints Background materials

- A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward as forward, such as "rotator", "Anna", "My gym". See https://en.wikipedia.org/wiki/Palin
- An isogram (or heterogram) is a word or phrase without a repeating letter, such as "cornflakes", "subdermatoglyphic". See https://en.wikipedia.org/wiki/Isogram.
- A pangram is a sentence or other sequence of characters in which every letter of the alphabet is used at least once, such as "Sphinx of black quartz, judge my vow". See https://en.wikipedia.org/wiki/Pangram. • An *anagram* is a word or phrase formed by rearranging the letters of a different
- word or phrase, using all the original letters exactly once, such as "fairy tales" for "rail safety" or "eleven plus two" for "twelve plus one". See https:// en.wikipedia.org/wiki/Anagram.A *blanagram* (from blank+anagram) is a word which is an anagram of another but
- for the substitution of a single letter, such as "chipotle" for "poetical" (anagrams after replacing "a" for "h"). See https://en.wikipedia.org/wiki/Blanagram.

Profile Logout

List comprehensions
Sets
Sequence packing and unpacking
Enumerate
With statement (for reading files)
Stains formatting (f stains

String formatting (f-strings or .format())

# **Journey refactor**

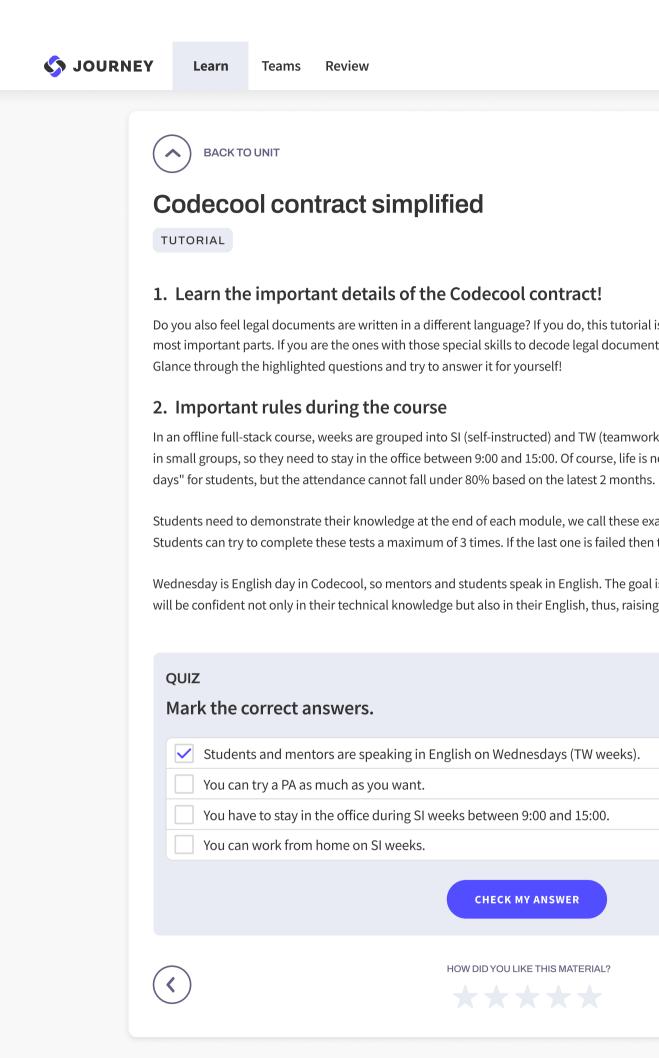
## 5. Interactive content

The learning experience was enhanced by providing interactive and engaging learning materials such as coding challenges, quizzes, and video tutorials. By completing each, users could collect XPs.

**TOOLS:** 

COMPETITOR ANALYSIS, BEST PRACTICE RESEARCH, WIREFRAMING, PROTOTYPING, DESIGN SYSTEM, **USABILITY TESTING** 

## Quiz



Do you also feel legal documents are written in a different language? If you do, this tutorial is here to help you with Codecool contract's most important parts. If you are the ones with those special skills to decode legal documents, now is your chance to test yourself.

In an offline full-stack course, weeks are grouped into SI (self-instructed) and TW (teamwork) weeks. On TW weeks students are working in small groups, so they need to stay in the office between 9:00 and 15:00. Of course, life is not that easy, so Codecool allows some "sick

Students need to demonstrate their knowledge at the end of each module, we call these exams Personal Assessments (PA in short). Students can try to complete these tests a maximum of 3 times. If the last one is failed then the student needs to be dismissed.

Wednesday is English day in Codecool, so mentors and students speak in English. The goal is that by the end of the course all students will be confident not only in their technical knowledge but also in their English, thus, raising the chances of gaining a job.

n English on Wednesdays (TW weeks).	
t.	
il weeks between 9:00 and 15:00.	
5.	
CHECK MY ANSWER	
HOW DID YOU LIKE THIS MATERIAL?	

# **Journey refactor**

## 5. Interactive content

The learning experience was enhanced by providing interactive and engaging learning materials such as coding challenges, quizzes, and video tutorials. By completing each, users could collect XPs.

TOOLS:

COMPETITOR ANALYSIS, BEST PRACTICE RESEARCH, WIREFRAMING, PROTOTYPING, DESIGN SYSTEM, USABILITY TESTING

## Coding challenge

As a student, any freshly acquired knowledge could be tested in a **browserembedded IDE** right under the tutorial. The code can be run multiple times and automated tests would provide evaluation and feedback. Successful completion would grant XP to the students in the specific topics they learnt.

1 2	<pre>function even0r0dd(number) {</pre>	
3 4	}	Ċ
	► RUN	
$\overline{)}$	HOW DID YOU LIKE THIS LESSON?	

# **Journey refactor**

## 6. Advancement logic & feed

By collecting XPs, users could unlock the upcoming units and acquire additional help and tutoring from mentors.

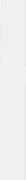
**TOOLS:** DESIGN THINKING, CARD SORTING, INFORMATION ARCHITECTURE, USER STORIES, USER FLOWS, VISION SPIKES

## Feed concept

### < BACK

Search **Programming Basics in** > Python General inf 0 0 First steps 0 Block-based program OW Teamw Collaborating with G Data basics Algorithm b





FEED PROTO

	My Account
Control flow abstraction (43) Codecool (10)	Control flow abstraction 52 Codecool 10
Block-based pro	ogramming 20th of Jan
In this unit, you will use block- create fun games easil	
Introduction to block-based programming	
JS Basics (43) JS Arrays 10	
SpaceCooler 🔶	SpaceCooler
In the previous tutorial, you learned how to create a function and how to call it. In this tutorial, we will continue introducing the functions by explaining how you can use different data as	In the previous tutorial, you learned how to create a function and how to call it. In this tutorial, we will continue introducing the functions by explaining how you can use different data as
SpaceCooler	SpaceCooler
In the previous tutorial, you learned how to create a function and how to call it. In this tutorial, we will continue introducing the functions by explaining how you can use different data as	In the previous tutorial, you learned how to create a function and how to call it. In this tutorial, we will continue introducing the functions by explaining how you can use different data as
N Teamwork	UNLOCK CRITERIAS
ist week you learnt the isics of JavaScript. This eek is the time for you to put uur freshly learnt skills into	52 52 52 52 JAVASCRIPT JUNGLE CODECOOL
actice within a team.	BASICS BOOGIE EXPEES
Collaborating w	vith Git 26th of Jan
In this unit, you will use block create fun games easily in Ja	

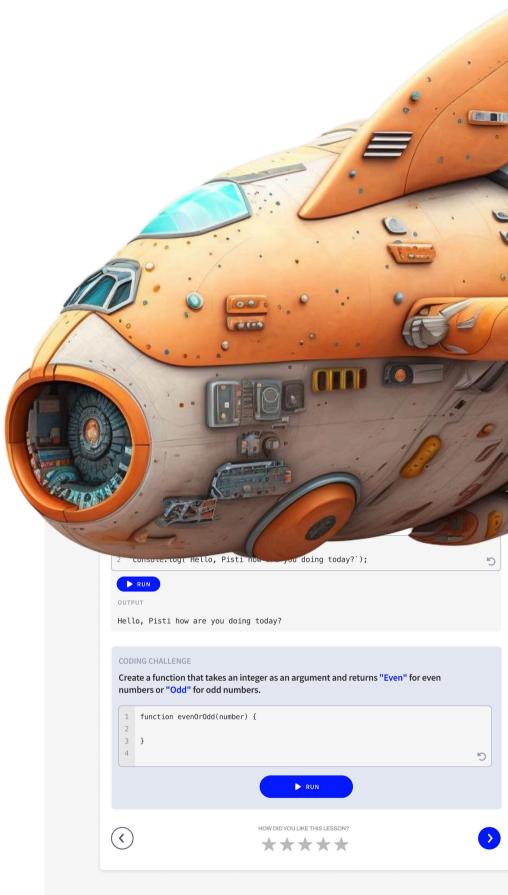
# **Journey refactor**

## 7. Theme creation

A theme was created to put the students progress into context which helped them understand where is programming used in the real world. (Discovery of industries concept)

TOOLS: WIREFRAMING, PROTOTYPING, DESIGN SYSTEM, USABILITY TESTING, MIDJOURNEY

## Theme (Space industry)





## Space theme for edu-platform

Being short of a creative designer and having issues with the overall usability the main focus was set to achieve clarity and implement a simple navigation with an XP system. Once that sufficed we entered the AI wars era, where Midjourney came handy for illustrating our content. The sci-fi theme was highly attractive to the IT students of the programming school which I discovered by conducting usability interviews using the prototype below.

FIGMA PROTO

# **Journey refactor**

## GAP 4 **DESIGN SYS**

### Font sys

#### NEW FONT SYS H1 - 56pt - Archivo LH: 70 Reassigning values H2 - 38pt - Archivo LH: 46 Reassigning values H3 - 30pt - Source sans pro LH: 36 Reassigning Variables H4 - 24pt - Source sans pro LH: 30 Reassigning Variables Reassigning Variables H5 - 20pt - Source sans pro LH: 30 Reassigning Variables Reassigning Variables H5 - 18pt - Source sans pro Reassigning Variables Hő - 18pt - Archivo BODY Body - 18pt - Source Sans Pro Body - 18pt - Source Sans Pro - Semiboli Highlight in paragraphs - 18pt - Source S Code 2 - 16pt - Menlo Code 2 - 16pt - Menio XP - 14 - SOURCE SANS PRO

**Reassigning values** Reassigning values

# Reassigning Variables

### Surface

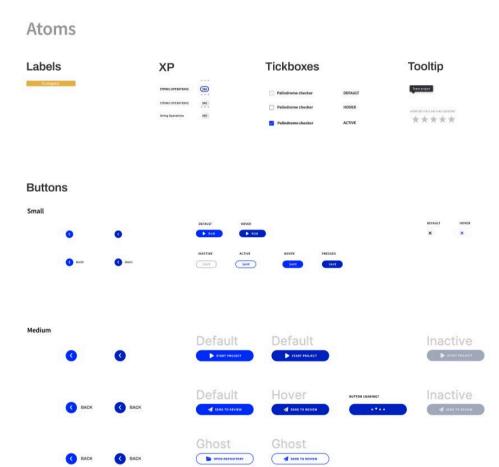
CUDEAOE		
SURFACE		Surface color: #FFF width: 950pc; Brogs shadow: background; #FFFFF; background; #FFFFF; backshadow: dps zps dar-gibal0, 0, 0, 0, 1);
	Code 2 - High - Mento	border radius: Idps;

Frame 6799

COLORS



### COMPONENTS



### Project types

Progress bar

3



### Molecules

35

JAWASCRIPT TYPES

Start programming

### Organisms

0 perations 20 (11)		Frame 6801	
Deepfors 146/140			QUIZ What is the correct answer?
		MY PROGRESS ① 28%	Students and mentors are speaking in English on Wednesdays (TW weeks).
			Wau can try a PA as much as you want.
			You have to stay in the office during SI weeks between 9:00 and 15:00.
)		<b>•</b> • • • •	You can work from home on 5J weeks.
APT		ANACOMY MARCANY MARCANY MARCANY ANACOMY MARCANY MARCANY MARCANY	Congratulations! Your answer is correct. 460 XP Onboardi +60 XP Onboardi
o Codecool			QUIZ
			Mark the correct answers.
enav		Experience Points () Experience Points ()	Students and mentors are speaking in English on Wednesdays (TW weeks).
1.1.84.1		Goals Others .	You can try a PA as much as you want.
		STITUNG COREARTIONS 346 String Operations (DD)	You have to stay in the office during SI weeks between 9:00 and 15:00.
		PYTHON LIST OPERATIONS "160" Python List Operations (18)	You can work from home on SI weeks,
		TWENTHONE CHARACTERS 220 Tweetypes Characters (22)	
Full Stack Development	~	Ratings (811) Ratings (811)	CHECK NY ANSWER
Programming Basics in Python	>	Demourn sail 3.2 Demourn sail 3.2 Dubatos: O 225 min Dubatos: O 235 min	
Welcome to Codecool	0		
Start programming	2		
JavaScript Basics		Palindrome checker	
Introduction to Git		Implement the is_palindrome function that checks whether a given input string is palindrome. Check the letters only. Upper or lower case, whitespace, and punctuation does not matter.	Quiz Mark the correct answers.
TEST YOURSELF			Students and mentors are speaking in English on Wednesdays (TW weeks).
		<ol> <li>A new Codepen is in Your Work tab on codepen.lo</li> <li>By opening your first codepen you can see an alert box with the text - JavaScript basics!</li> </ol>	You can try a PA as much as you want.
		an of almost have not considered and any particular ready and the ready and the ready of the ready of	You have to stay in the office during SI weeks between 9:00 and 15:00.
			You can work from home on SI weeks.

The answer is correct, but you haven't found all of them.