CAREER PATHS

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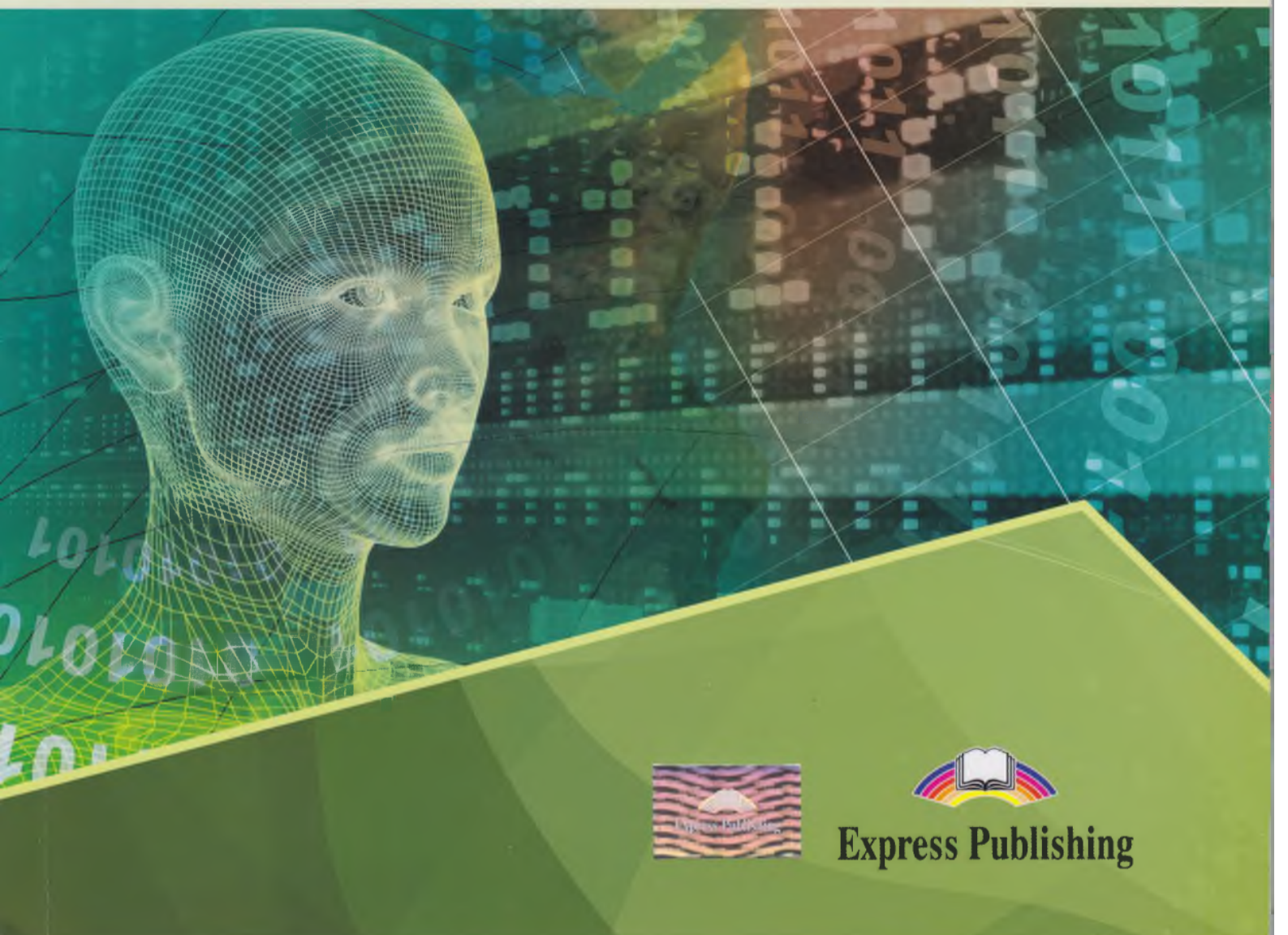
SOFTWARE ENGINEERING



Express Publishing

CAREER PATHS

SOFTWARE ENGINEERING

Book 1

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Vocabulary

3 **Match the words (1-8) with the definitions (A-H).**

1 __ evaluate
2 __ software
3 __ investigate
4 __ write
5 __ design
6 __ develop
7 __ install
8 __ test

A to form letters and words into sentences or instructions
B to plan the way that something will be created
C to bring something from initial conception to action or implementation
D to carefully study something and assess its qualities
E to operate something to see whether it works
F to put something into the place where it will function
G to get more information about something
H the programs that perform particular functions on a computer

4 **Choose the sentence that uses the underlined part correctly.**

1 A Programming-in-the-small often creates less complex software.
B Students must develop problems in order to repair the program.

2 A The teacher will install the software's performance.
B Students are working on programming-in-the-large to create a program with many levels and functions.

5 **Listen and read the course description again. What is the difference between programming-in-the-large and programming-in-the-small?**

Listening

6 **Listen to a conversation between a student and an instructor. Mark the following statements as true (T) or false (F).**

1 __ The woman recommends programming-in-the-large.
2 __ The man enjoys investigating problems.
3 __ The man is nervous about working in groups.

7 **Listen again and complete the conversation.**

Student: Professor Wendell? I'm really interested in **1** _____ _____. But is it a good career choice?
Instructor: I think so. You are a good leader. You'd enjoy **2** _____-_____-_____-_____.
Student: I agree. I like working in groups.
Instructor: You like to **3** _____ _____, right?
Student: Yes, I do. But software engineering seems like it could **4** _____ _____.
Instructor: It's sometimes challenging when others **5** _____ your work. But it if you are patient, it is very rewarding.
Student: That **6** _____ _____ something I can do.

Speaking

8 **With a partner, act out the roles below based on Task 7. Then, switch roles.**

USE LANGUAGE SUCH AS:
I'm interested in ... / You're a good ...
It can be ...

Student A: You are a student. Talk to Student B about:
- a career in software engineering
- how it is rewarding
- how it is challenging

Student B: You are an instructor. Talk to Student A about a career in software engineering.

Writing

9 **Use the conversation from Task 8 to complete a career advice webpages.**

Is Software Engineering Right for You?

Rewards
- Engineers can _____.
- The job comes with opportunities to _____

Challenges
- It can be hard to _____.
- Engineers must _____.

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

1 __ PC
2 __ tablet
3 __ laptop
4 __ desktop
5 __ workstation

A a very small computer that typically does not have a keyboard
B a hinged computer that is easy to transport
C a computer that is intended for personal use
D a powerful computer that processes advanced tasks
E a computer that is intended for use in one location

4 Read the sentences and choose the correct words.

1 The student carried a **desktop / notebook** to class every day.
2 The company connected all of its computers to the same **PC / server.**
3 Early **computers / laptops** were so large that they occupied entire rooms.
4 A **tablet / computing cluster** is more powerful than most other types of computers.
5 The company installed **embedded computers / workstations** in employees' cars.

5 Listen and read the journal article again. What is a benefit of using a tablet?

Listening

6 Listen to a conversation between two engineers. Mark the following statements as true (T) or false (F).

1 __ The woman finished developing a program for desktops.
2 __ The man recommends creating another application for laptops.
3 __ The woman plans to make the program work with a touch screen.

7 Listen again and complete the conversation.

Engineer 1: Hey, Grace. What are you **1** _____ _____ ?
Engineer 2: I'm still developing the home banking application.
Engineer 1: Wait, didn't you **2** _____ _____ already?
Engineer 2: Well, sort of. I finished a version for **3** _____ _____ _____ .
Engineer 1: So what are you doing now?
Engineer 2: Next, I'm going to create an application for **4** _____ .
Engineer 1: Oh, that's a good idea. **5** _____ _____ _____ carry tablets nowadays.
Engineer 2: Right. That's why **6** _____ _____ needs to work well with a touch screen.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Didn't you finish ...
What are you doing ...
Next, I'm going to ...

Student A: You are an engineer. Talk to Student B about:

- a program that he or she is developing
- the types of computers that the program currently works on
- the types of computers that the program will work on

Student B: You are an engineer. Talk to Student A about a program that you are developing.

Writing

9 Use the conversation from Task 8 to complete the project extension request.

Brown & Steele
Software Development:

Project Extension Request Form

Project:

Current Progress: So far, I developed the program for use on _____ .

Reason for Extension: I would like to develop the program for use on _____ because _____ .
An important feature of the new version will be _____ _____ .