Software Student Worksheet

- 1.List at least five programming languages commonly used in software development.
- a. JavaScript
- b. PHP
- c. Python
- d. Java
- e. C
- 2. Select one programming language from your list above and briefly describe its main features and applications.

Language: PHP

Features: Server-side scripting language, especially designed for web development, easy integration with html

Applications: Interaction with databases, development of dynamic web sites and business and commercial applications.

Task 2: Version Control.Define version control and explain its importance in software development.

Definition: Manage changes made to a source code

Avoid conflicts when users make changes at the same time, easier teamwork and less likelihood Importance: of errors.

Task 3: Debugging

What is debugging in software development?

Definition:

Help solve problems faster and improve productivity and software quality.

Name at least two techniques or tools used for debugging code and briefly describe how each one helps in identifying and fixing errors.

Technique/Tool 1: OpenRefine

Description:

Improve data quality and structure by correcting common errors.

Technique/Tool 2: Tabula

Description: A tool that allows you to extract data from tables that appear in PDF documents. Task 5: Documentation Explain the importance of documentation in software development. Importance: Allows you to quickly understand the code and make changes without errors. Name at least two types of documentation commonly used in software projects and briefly describe each one. Documentation Type 1: Document360 Description: It is a platform designed to create, collaborate and publish documentation. Documentation Type 2: IA Writer Description: IA Writer is a clean, simple and distraction-free writing application designed for concentrated writing. **Present Simple and Present Continuous** Task 1: Understanding the Present Simple Tense Complete the sentences with the correct form of the verbs in the present simple tense. a. The software engineer writes (write) code every day. b. The program <u>runs</u> (run) smoothly on most devices. c. The team meets ___ (meet) every Monday to discuss project updates. d. Our software supports (support) multiple languages.

e. He checks (check) his emails regularly for any new notifications.

Task 2: Understanding the Present Continuous Tense

Rewrite the sentences using the present continuous tense.

a. The developers write code every day.

Rewrite: The developers are writing code right now.

b. The tester runs the software on different platforms.

Rewrite: The tester <u>is running</u> the software on different platforms at the moment.

c. They meet every Monday to discuss project updates.

Rewrite: They <u>are meeting</u> every Monday to discuss project updates.

d. Our software supports multiple languages.

Rewrite: Our software is supportingmultiple languages.

e. He checks his emails regularly for any new notifications.

Rewrite: He is checking his emails regularly for any new notifications.

Task 3: Choose the Correct Tense

Choose the correct form of the verb (present simple or present continuous) to complete the sentences.

- a. The team is working (is working / works) on a new feature for the software this week.
- b. She usually <u>writes</u> (is writing / writes) the code, but today she is testing it.
- c. Our software <u>supports</u> (is supporting / supports) various file formats.
- d. They <u>are meeting</u> (meet / <u>are meeting</u>) with the client right now to discuss project requirements.
- e. The program <u>crashes</u> (crashes / is crashing) frequently on older devices.