

2.2 Visual Programming

Creating a Visual Programming Application

The following steps guide when creating a visual programming application

1. Identify the Problem

Determine the problem that needs to be solved.

For example:

Learners cross the roads near the school carelessly.

2. Plan the Solution

Decide how the program will solve the problem.

For example:

Create a road safety game that teaches safe road crossing.

3. Select Appropriate Features

Choose suitable:

Sprites

Backgrounds

Sounds

Animations

Coding blocks

4. Create the Program

Arrange coding blocks to form instructions that perform the required task.

5. Test the Program

Run the program and identify errors.

6. Improve the Program

Correct errors and make improvements where necessary.

Additional Assessment questions

1. A supermarket owner wants a simple application to help train employees on customer service. Which area can benefit from visual programming?
 - A. Business
 - B. Mining
 - C. Forestry
 - D. Fishing
2. During a school talent show, learners presented a Scratch project where players scored points by answering questions correctly. Which product of visual programming was demonstrated?
 - A. A game
 - B. An animation
 - C. A simulation

D. A story

3. A teacher created an interactive Scratch lesson to help learners understand fractions. Which application area of visual programming does this project represent?
 - A. Story
 - B. Educational application
 - C. Simulation
 - D. Animation
4. A learner wanted to understand how applications are developed using visual programming software. Which activity would best help answer this question?
 - A. Exploring different application areas of visual programming
 - B. Creating and testing a Scratch project
 - C. Discussing the importance of visual programming in daily life
 - D. Identifying problems that can be solved using visual programming
5. During a research task, learners used the internet, videos, and classroom discussions to gather information about visual programming. Which resource below would be least relevant?
 - A. Print media
 - B. Digital media
 - C. Video tutorials
 - D. Farming tools
6. A learner was explaining visual programming to her classmates using the statements below. Which of the statements is NOT TRUE about visual programming?
 - A. It uses graphical blocks to create programs.
 - B. It helps beginners learn programming concepts.
 - C. Users create programs by joining coding blocks together.
 - D. It requires all instructions to be typed as text commands.
7. A teacher explained the benefits of visual programming during a Computer Studies lesson. The following are benefits of visual programming EXCEPT _____.
 - A. It helps develop problem-solving skills.
 - B. It encourages creativity and innovation.
 - C. It supports the development of educational applications.
 - D. It increases the speed of internet connectivity.
8. A learner developed an interactive story to educate members of the community on water conservation. Explain five factors that would make the story attractive and effective to users.