Computer Programming Problem Solving Skills

This website helps novice programmers to enhance their algorithmic thinking in programming domain. Programming exercises are given related to different topics of programming domain. Pseudo-code technique is used in solving the exercises. The website provides four different applications, PAAM based PROSOL application, PROSOLVE Game, chatbot (PROBSOL-BOT), and Object-Oriented PROSOL applications.

PAAM based PROSOL application

The application includes introductory programming topics such as designing an algorithm, input/output, Selection Structure (if statement), Repetition Structures (loops), functions, and arrays. The application covers two main aspects of programming education, problem analysis and algorithmic thinking. The problem analysis aspect of the model covers programming requirements (input, output and process) of the given programming question. The algorithmic thinking is promoted by using pseudo-code technique in the model. Click here to access the application.

PROSOLVE Game

The game covers basic topics of introductory programming domain. There are 7 Levels in the game. The player can collect one point for each correct line of the answer. The player can win Bronze, Silver or Gold Medal based on the earned points. Moreover, the player can get a cup (Black, Bronze, Silver and Gold) depends on the total points obtained. Click here to access the game.

Chatbot (PROBSOL-BOT)

The chatbot (ProbSol-Bot) is prepared and offered in the introductory programming course for novices. The purpose of the chatbot is to provide extra support to students' queries regarding the doubts that might arise while studying the course. The chatbot provides information about different topics of the course in textual, audio, and animation formats. The chatbot can be accessed from the right down corner of this website.

Object-Oriented PROSOL Application

The application introduces problem solving strategy for Object-Oriented Programming concepts in programming education. The application covers different topics such as object and class, constructor, inheritance, polymorphism and encapsulation. The application consists of class diagram, pseudo-code solution, and test class for each programming question. Click here to access the application.

Mobile App for PROSOL application

CLICK HERE TO **DOWNLOAD MOBILE APP FOR ANDROID**   **DOWNLOAD MOBILE APP FOR iPHONE**

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