

PROGRAMMING PROJECTS

One Programming Project is required. The top programs may be nominated for ComputerFest.

In addition to a running program, the student must submit documentation of what his projects does, how it operates, what its features are. Discuss what features were not implemented and what features they would like to add or extend.

A student may propose their own project design with the consent of the instructor

PROJECTS:

- 1) Address book (w/names, addresses, phone no, birthdates)
 - A) Capability: find /add/delete/edit entries
 - B) Plus: save/restore to file, sort
- 2) Calculators

Pick one of the following alternatives:

 - A) Basic Calculator (+, -, x, /, memory, square root, reciprocal)
 - B) Boolean/Hex Calculator (binary, octal, hex conversions)
 - C) Financial Calculator (business calculations, i.e. loans, etc)
- 3) Puzzles
 - A) Memory Puzzle (matching colors, numbers, images, sounds)
(grid: 4X5 minimum)
 - B) Soduko
 - C) CodeBreaker (Mastermind)
 - D) Spelling (Hangman)
 - E) Mine Sweeper
 - F) Crossword, Jumble
- 4) Board games (Board GUI, Playing Pieces, Legal_Move_Check)
 - A) Chess/ Checkers/ BackGammon
 - B) 3D TicTacToe
 - C) Reversi
 - D) Connect_4
 - E) Battleship
- 5) Card games(Card, Deck, Shuffle, Dealer, Player)
 - A) Blackjack
 - B) Solitaire
- 6) Role Playing
 - A) Hamarabi
 - B) Star Trek
- 7) Video Games/ Simulation
 - A) Paddle Games: Pong, Breakout
 - B) Asteroids, Invaders
 - C) Lunar Lander(Altitude, Velocity, Fuel, Thrust)
- 8) Learning Programs (Data Structures/Trees/Collections, i.e.Freddie)