Pattern Match - Proposed Functions and Logic (v0.1)

Play game btn:

onclick="selectBoardSize()"

selectBoardSize()

- ➤ Generate three buttons asking player to select 3x3, 4x4, 5x5
- Save result as variable = boardSize
- Run: selectColorNumber()

selectColorNumber()

- Generate three buttons asking player to select 4, 5 or 6 colours for the patterns
- > Save result as variable = colorNumber
- Run: countdownTimer()

observeTimer()

- ➤ Generate four buttons asking player to select 5 seconds, 10 seconds or 15 seconds
- Save result as variable = observeTimer
- Run: playTimer()

playTimer()

- Generate four buttons asking player to select 'no timer', 5 seconds, 10 seconds or 15 seconds
- Save result as variable = playTimer
- Run: playGame(boardSize, colorNumber, observeTimer, playTimer,)

playGame(boardSize, colorNumber, observeTimer)

- Generate random number array for pattern depending on 'boardSize' = newPattern
- Translate array into colours on board depanding on 'colorNumber'
- Display for 'x' seconds depending on 'observeTimer'
- Run playerTurn()

playerTurn(playTimer)

- Generate empty board
- Generate palette
- start timer depending on 'playTimer'
- User select and fill in colours on board to match the pattern from newPattern
- ➤ Generate 'playerPattern' array
- Submit btn click: turnResult(newPattern, playerPattern, time)

turnResult(newPattern, playerPattern, time)

- Record and increment turnCount(10 turns)
- Compare newPattern and playerPattern array
- Display win/loss result and time if win
- Run: recordResults(result, time)
- If turnCount<10, run playGame()</p>
- If turnCount=10, display window with btns 'main menu' and 'play again with same options'

recordResults(result, time)

- Build results table for current game
- Display results and add new results
- Display and update an average completion time