

Class diagram

Questions for TA:

- Send a list of elements to Matrix? Or send a big string and parse it in Matrix?
- Information about what row and column can be chosen? Should we store this information in the matrix class? Or does this make it less deep?
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Common styling? It should be consistent through the code

Functions indentation

```
"void function(param Param) {  
    return value  
}" - or a different style
```

Variable name style: camelCase (exampleVar)

Classes

- gameManager (main)
 - Game-loop
 - Contain an instance of the matrix
 - Contain an instance of the buffer
 - Contain an instance of a sequence
 - Contain an instance of timer
 - F6 by creating new buffer, seq, matrix and send to GUI
 - Does this handle F6? F1?
- [final] Buffer
 - <<constructor>> Buffer(): Buffer
 - addElement(String: element): Buffer
 - removeElement(): Buffer
 - getElement(int: Index)
 - checkFor(sequence: List[elements]): boolean
 - F4, F5
- [final] Matrix() *create a new matrix for each new puzzle
 - <<constructor>> Matrix(String? Or List?)
 - getelement(int: xIndex. Int: yIndex) - needed for the display/GUI class to
- [final] Sequences (make class for this?)
 - <<constructor>>
 - List of all possible sequences
 - (This would just be a List or sequence of elements that can be used for the matrix, but it has to be displayed.)
- [final] TimerClass *could do one of the state diagrams of this class
 - timeRemaining
 - start(): void

- getTimeRemaining(): Time - for comparison in gameLoop
 - getTimeAsString(): String - for display
 - updateTime()
- Display/GUI class
 - displayMatrix(matrix: Matrix)
 - displayBuffer(buffer: Buffer)
 - F2, (part) F3, F4, F7, F8
 - Need a way to tell the gameManager that something has been chosen
- We need a place to do F5: in buffer?
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How do we let the buffer know that a new value has been chosen if it is handled in the GUI class?

Where do we store information on what values are allowed to be chosen from? In the matrix or the gameManager? How do we pass this information to the Display class to allow only “correct” spots to be chosen.

Could we make a class called gameFunctionalities with F1, F6, and F5?

Should F5 have its own class?

How do signals from the GUI class to the gameManager? *Niatna

*Should confirm that our class diagram meets all the requirements for our functional abilities

Class Diagram

Object Diagram

State Machine Diagram 1

State Machine Diagram 2

Sequence Diagram 1

Sequence Diagram 2