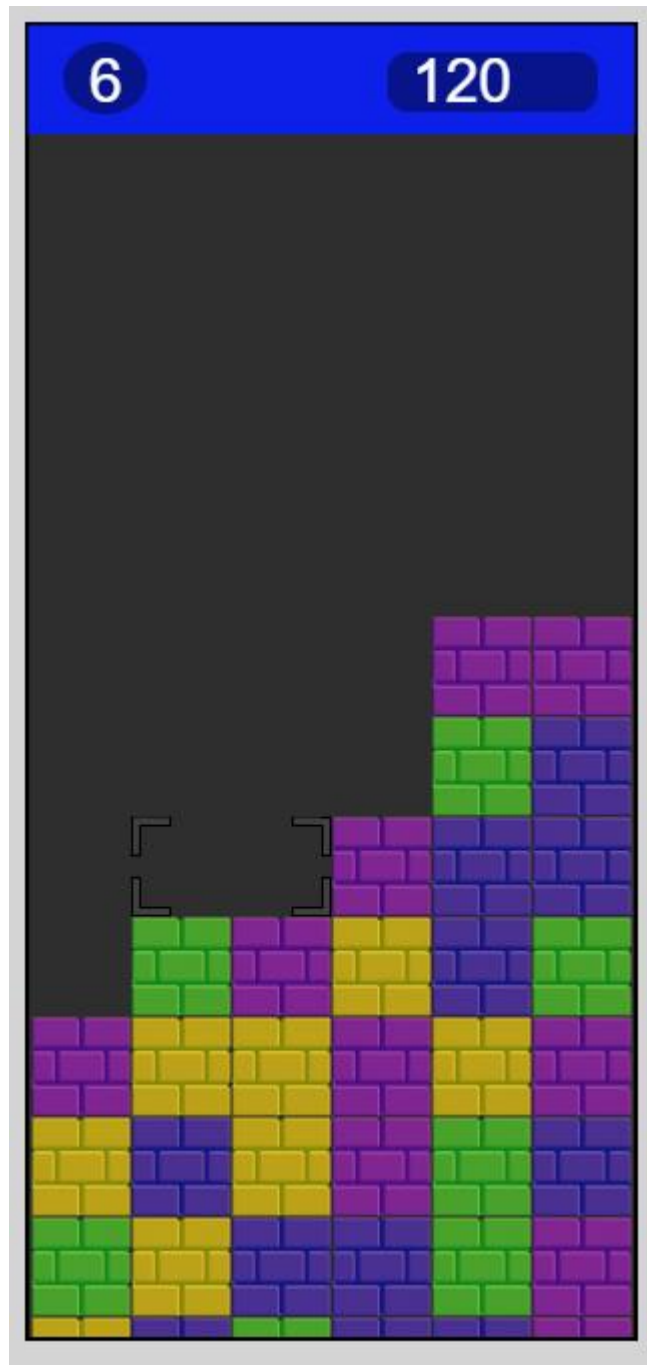


# PuzzleJS



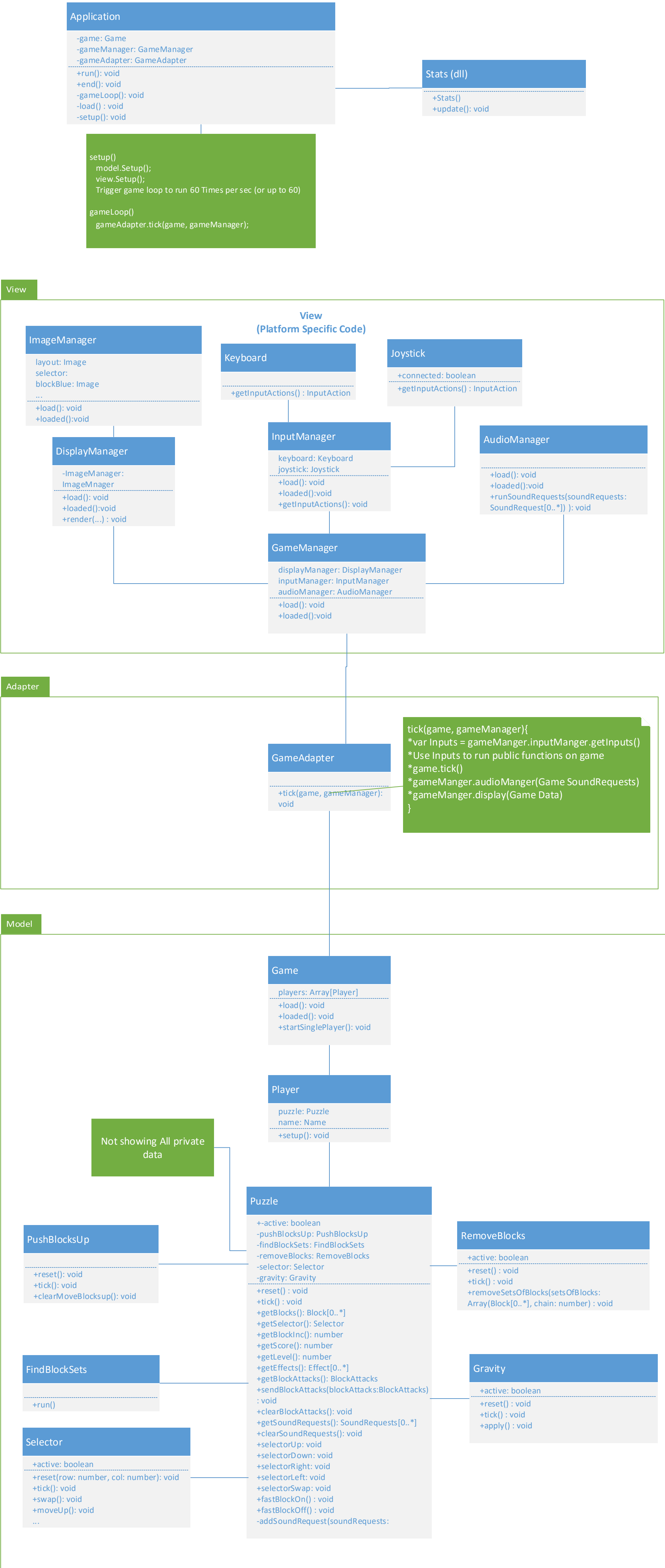
# About

- A block based puzzle game.
  - The blocks rise from the bottom
  - To remove blocks, you need to get 3 or more blocks in a row. Horizontally or Vertically.
  - When the blocks reach the top the game is over
  - Blocks fall to gravity
  - You can swap blocks on the same row
- 
- Uses Model View Adapter (MVA) Design Pattern
  - <https://en.wikipedia.org/wiki/Model-view-adapter>

Early Prototype: <http://www.puzzle-js.com>

# Overview

All public functions and variables are shown.  
Constructors are not shown.  
Most private functions and variables are not shown here.



# Enumerations

<<enumeration>>  
BlockState

None  
Swap  
Gravity  
Remove

<<enumeration>>  
ImageTypes

GreenBlock  
BlueBlock  
RedBlock  
PurpleBlock  
YellowBlock  
Selector  
Layout

<<enumeration>>  
BlockColor

Green  
Blue  
Red  
Purple  
Yellow

<<enumeration>>  
KeyState

None  
Down  
Up

<<enumeration>>  
ButtonState

None  
Down  
Up

<<enumeration>>  
SoundRequest

Pause  
Resume  
MusicStart  
MusicMute  
MusicUnMute  
SoundEffectsMute  
SoundEffectsUnMute  
Swap  
BlocksFall  
BlockSet  
Combo  
LargeCombo  
Chain  
LargeChain

<<enumeration>>  
Button

A  
B  
X  
Y  
LeftTrigger  
DPadLeft  
DPadRight  
DPadUp  
DPadDown

<<enumeration>>  
Key

A  
D  
F  
R  
S  
W  
Space  
Left  
Right  
Up  
Down

# DataTypes

Block
+row : number +col: number +color: BlockColor +state: BlockState
+Block(row : number, col: number, color: BlockColor, state: BlockState)

Block:  
This is a block in the puzzle.  
Its always in a row and col.

BlockAttacks
+special:number +six:number +five:number +four:number +three:number
+BlockAttacks(special:number,six:number, five:number, four:number, three:number)

Block Attacks:  
When a player gets a combo/chain and is not playing single palyer, It creates a BlockAttacks and sends it to the the other player.

RemovalInstance
+chain: number +tick: number +endTick: number
+RemoveSet(chain: number, tick: number, endTick: number)

RemoveallInstance:  
When a set of blocks are removed, a instance is created.  
After the removal is compleate it calls gravity, and passes on the chain

JoystickState
+R: ButtonState +A: ButtonState +Up: ButtonState +Down: ButtonState +Left: ButtonState +Right: ButtonState
JoystickState()

ControllerState:  
The state of a controller (ex: xbox controller) at a given point in time.

KeyboardState
+A: KeyboardState +D: KeyboardState +F: KeyboardState +R: KeyboardState +S: KeyboardState +W: KeyboardState +Space: KeyboardState +Up: KeyboardState +Down: KeyboardState +Left: KeyboardState +Right: KeyboardState
KeyboardState()

KeyboardState:  
The state of the keyboard at a given point in time.

Effect
+tickStart:number +tickEnd:number +row:number +col:number +chain:number +set:number
+Effect(tickStart:number, tickEnd:number, row:number, col:number, chain:number, set:number)

Effect:  
When you get a combo of 4 or more and/or , or a chain an effect holds that data. it goes away after its tickEnd. Primary purpose is for display to render the effect