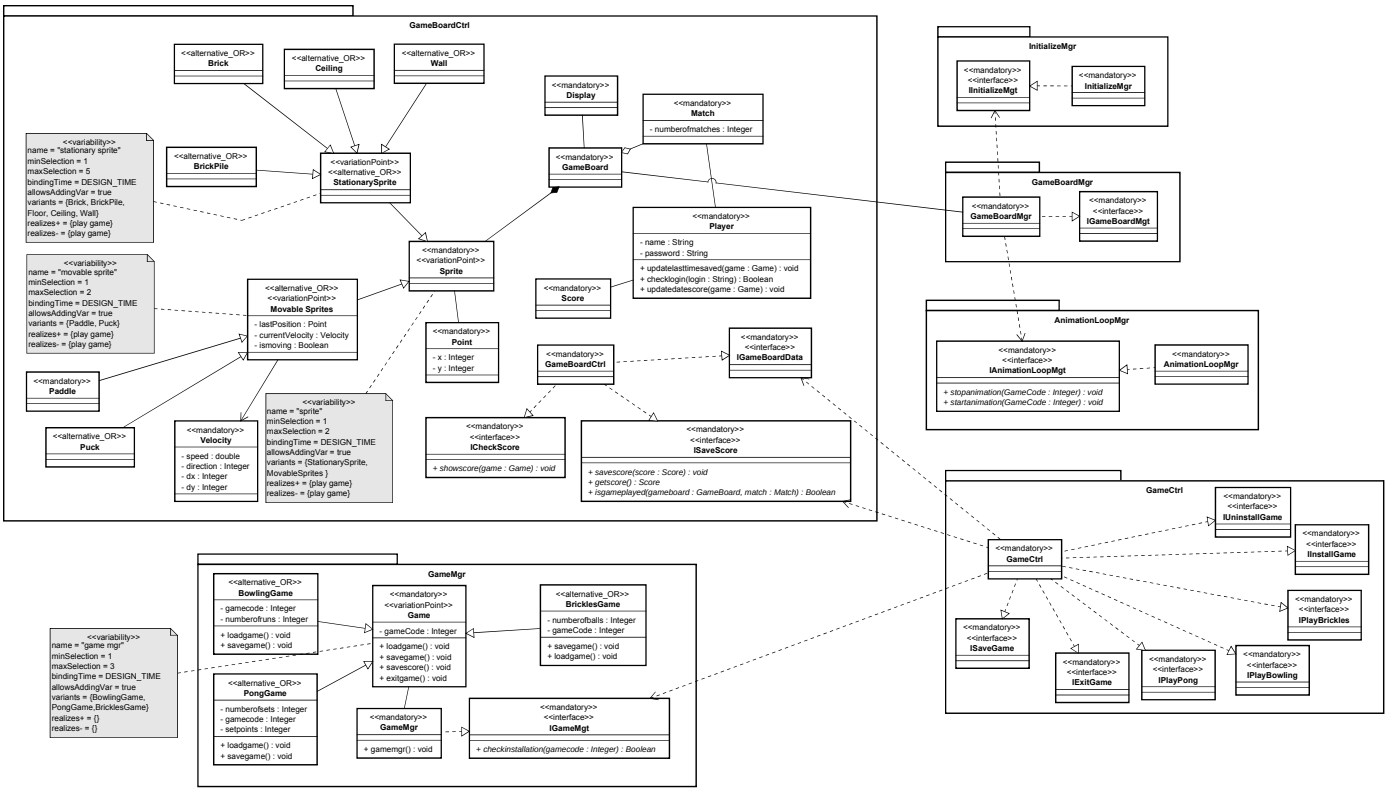
GameBoardCtrl
<<alternative_OR>>
Brick
<<alternative_OR>>
Ceiling
<<alternative_OR>>
Wall
<<mandatory>>
Display
<<mandatory>>
Match
- numberofmatches : Integer
<<variability>>
name = "stationary sprite"
minSelection = 1
maxSelection = 5
bindingTime = DESIGN_TIME
allowsAddingVar = true
variants = {Brick, BrickPile, Floor, Ceiling, Wall}
realizes+ = {play game}
realizes- = {play game}
<<alternative_OR>>
BrickPile
<<variationPoint>>
<<alternative_OR>>
StationarySprite
<<mandatory>>
GameBoard
<<mandatory>>
Player
- name : String
- password : String
+ updatelasttimesaved(game : Game) : void
+ checklogin(login : String) : Boolean
+ updatedatescore(game : Game) : void
<<variability>>
name = "movable sprite"
minSelection = 1
maxSelection = 2
bindingTime = DESIGN_TIME
allowsAddingVar = true
variants = {Paddle, Puck}
realizes+ = {play game}
realizes- = {play game}
<<alternative_OR>>
<<variationPoint>>
Movable Sprites
- lastPosition : Point
- currentVelocity : Velocity
- ismoving : Boolean
<<mandatory>>
<<variationPoint>>
Sprite
<<mandatory>>
Score
<<mandatory>>
Point
- x : Integer
- y : Integer
<<mandatory>>
Paddle
<<alternative_OR>>
Puck
<<mandatory>>
Velocity
- speed : double
- direction : Integer
- dx : Integer
- dy : Integer
<<variability>>
name = "sprite"
minSelection = 1
maxSelection = 2
bindingTime = DESIGN_TIME
allowsAddingVar = true
variants = {StationarySprite, MovableSprites }
realizes+ = {play game}
realizes- = {play game}
<<mandatory>>
GameBoardCtrl
<<mandatory>>
<<interface>>
IGameBoardData
<<mandatory>>
<<interface>>
ICheckScore
+ showscore(game : Game) : void
<<mandatory>>
<<interface>>
ISaveScore
+ savescore(score : Score) : void
+ getscore() : Score
+ isgameplayed(gameboard : GameBoard, match : Match) : Boolean
InitializeMgr
<<mandatory>>
<<interface>>
IInitializeMgt
<<mandatory>>
InitializeMgr
GameBoardMgr
<<mandatory>>
GameBoardMgr
<<mandatory>>
<<interface>>
IGameBoardMgt
AnimationLoopMgr
<<mandatory>>
<<interface>>
IAnimationLoopMgt
+ stopanimation(GameCode : Integer) : void
+ startanimation(GameCode : Integer) : void
<<mandatory>>
AnimationLoopMgr
GameCtrl
<<mandatory>>
GameCtrl
<<mandatory>>
<<interface>>
IUninstallGame
<<mandatory>>
<<interface>>
IInstallGame
<<mandatory>>
<<interface>>
IPlayBrickles
<<mandatory>>
<<interface>>
ISaveGame
<<mandatory>>
<<interface>>
IExitGame
<<mandatory>>
<<interface>>
IPlayPong
<<mandatory>>
<<interface>>
IPlayBowling
GameMgr
<<alternative_OR>>
BowlingGame
- gamecode : Integer
- numberofruns : Integer
+ loadgame() : void
+ savegame() : void
<<mandatory>>
<<variationPoint>>
Game
- gameCode : Integer
+ loadgame() : void
+ savegame() : void
+ savescore() : void
+ exitgame() : void
<<alternative_OR>>
BricklesGame
- numberofballs : Integer
- gameCode : Integer
+ savegame() : void
+ loadgame() : void
<<variability>>
name = "game mgr"
minSelection = 1
maxSelection = 3
bindingTime = DESIGN_TIME
allowsAddingVar = true
variants = {BowlingGame, PongGame,BricklesGame}
realizes+ = {}
realizes- = {}
<<alternative_OR>>
PongGame
- numberofsets : Integer
- gamecode : Integer
- setpoints : Integer
+ loadgame() : void
+ savegame() : void
<<mandatory>>
GameMgr
+ gamemgr() : void
<<mandatory>>
<<interface>>
IGameMgt
+ checkinstallation(gamecode : Integer) : Boolean