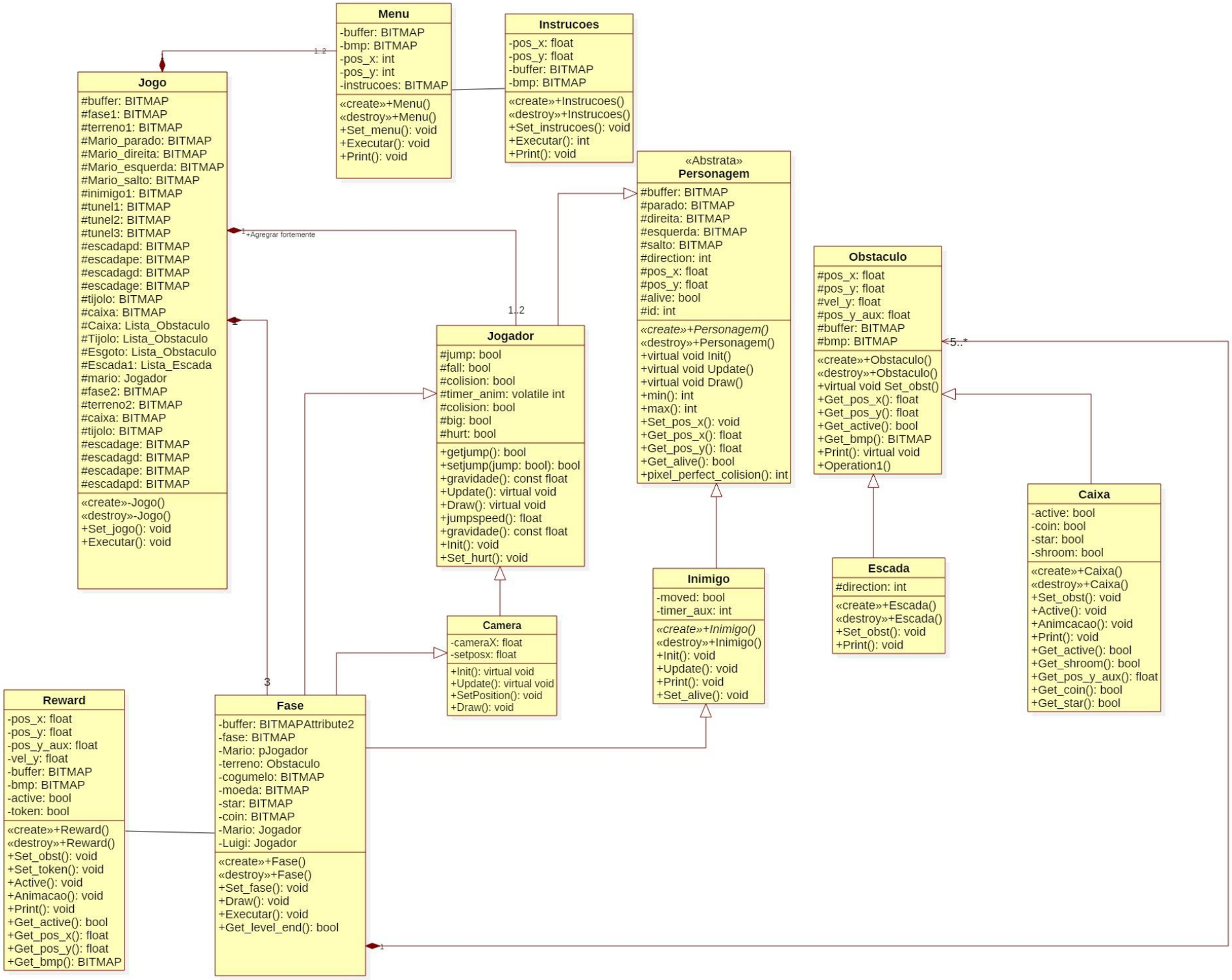
Menu
-buffer: BITMAP
-bmp: BITMAP
-pos_x: int
-pos_y: int
-instrucoes: BITMAP
«create»+Menu()
«destroy»+Menu()
+Set_menu(): void
+Executar(): void
+Print(): void
Instrucoes
-pos_x: float
-pos_y: float
-buffer: BITMAP
-bmp: BITMAP
«create»+Instrucoes()
«destroy»+Instrucoes()
+Set_instrucoes(): void
+Executar(): int
+Print(): void
1..2
Jogo
#buffer: BITMAP
#fase1: BITMAP
#terreno1: BITMAP
#Mario_parado: BITMAP
#Mario_direita: BITMAP
#Mario_esquerda: BITMAP
#Mario_salto: BITMAP
#inimigo1: BITMAP
#tunel1: BITMAP
#tunel2: BITMAP
#tunel3: BITMAP
#escadapd: BITMAP
#escadape: BITMAP
#escadagd: BITMAP
#escadage: BITMAP
#tijolo: BITMAP
#caixa: BITMAP
#Caixa: Lista_Obstaculo
#Tijolo: Lista_Obstaculo
#Esgoto: Lista_Obstaculo
#Escada1: Lista_Escada
#mario: Jogador
#fase2: BITMAP
#terreno2: BITMAP
#caixa: BITMAP
#tijolo: BITMAP
#escadage: BITMAP
#escadagd: BITMAP
#escadape: BITMAP
#escadapd: BITMAP
«create»-Jogo()
«destroy»-Jogo()
+Set_jogo(): void
+Executar(): void
1
+Agregrar fortemente
1..2
«Abstrata»
Personagem
#buffer: BITMAP
#parado: BITMAP
#direita: BITMAP
#esquerda: BITMAP
#salto: BITMAP
#direction: int
#pos_x: float
#pos_y: float
#alive: bool
#id: int
«create»+Personagem()
«destroy»+Personagem()
+virtual void Init()
+virtual void Update()
+virtual void Draw()
+min(): int
+max(): int
+Set_pos_x(): void
+Get_pos_x(): float
+Get_pos_y(): float
+Get_alive(): bool
+pixel_perfect_colision(): int
Obstaculo
#pos_x: float
#pos_y: float
#vel_y: float
#pos_y_aux: float
#buffer: BITMAP
#bmp: BITMAP
«create»+Obstaculo()
«destroy»+Obstaculo()
+virtual void Set_obst()
+Get_pos_x(): float
+Get_pos_y(): float
+Get_active(): bool
+Get_bmp(): BITMAP
+Print(): virtual void
+Operation1()
5..*
Jogador
#jump: bool
#fall: bool
#colision: bool
#timer_anim: volatile int
#colision: bool
#big: bool
#hurt: bool
+getjump(): bool
+setjump(jump: bool): bool
+gravidade(): const float
+Update(): virtual void
+Draw(): virtual void
+jumpspeed(): float
+gravidade(): const float
+Init(): void
+Set_hurt(): void
Caixa
-active: bool
-coin: bool
-star: bool
-shroom: bool
«create»+Caixa()
«destroy»+Caixa()
+Set_obst(): void
+Active(): void
+Animcacao(): void
+Print(): void
+Get_active(): bool
+Get_shroom(): bool
+Get_pos_y_aux(): float
+Get_coin(): bool
+Get_star(): bool
Escada
#direction: int
«create»+Escada()
«destroy»+Escada()
+Set_obst(): void
+Print(): void
Inimigo
-moved: bool
-timer_aux: int
«create»+Inimigo()
«destroy»+Inimigo()
+Init(): void
+Update(): void
+Print(): void
+Set_alive(): void
Camera
-cameraX: float
-setposx: float
+Init(): virtual void
+Update(): virtual void
+SetPosition(): void
+Draw(): void
3
Reward
-pos_x: float
-pos_y: float
-pos_y_aux: float
-vel_y: float
-buffer: BITMAP
-bmp: BITMAP
-active: bool
-token: bool
«create»+Reward()
«destroy»+Reward()
+Set_obst(): void
+Set_token(): void
+Active(): void
+Animacao(): void
+Print(): void
+Get_active(): bool
+Get_pos_x(): float
+Get_pos_y(): float
+Get_bmp(): BITMAP
Fase
-buffer: BITMAPAttribute2
-fase: BITMAP
-Mario: pJogador
-terreno: Obstaculo
-cogumelo: BITMAP
-moeda: BITMAP
-star: BITMAP
-coin: BITMAP
-Mario: Jogador
-Luigi: Jogador
«create»+Fase()
«destroy»+Fase()
+Set_fase(): void
+Draw(): void
+Executar(): void
+Get_level_end(): bool
1