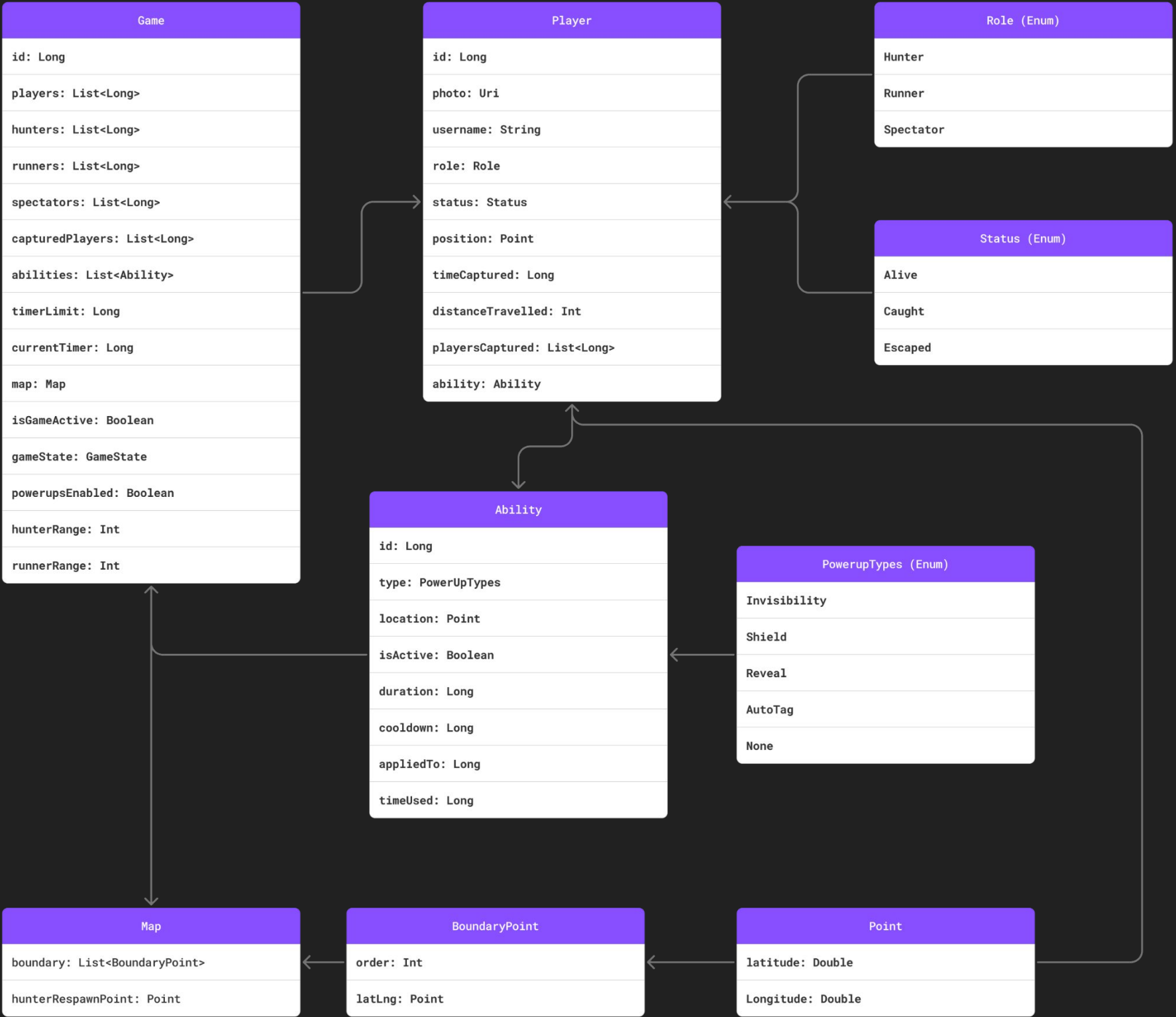
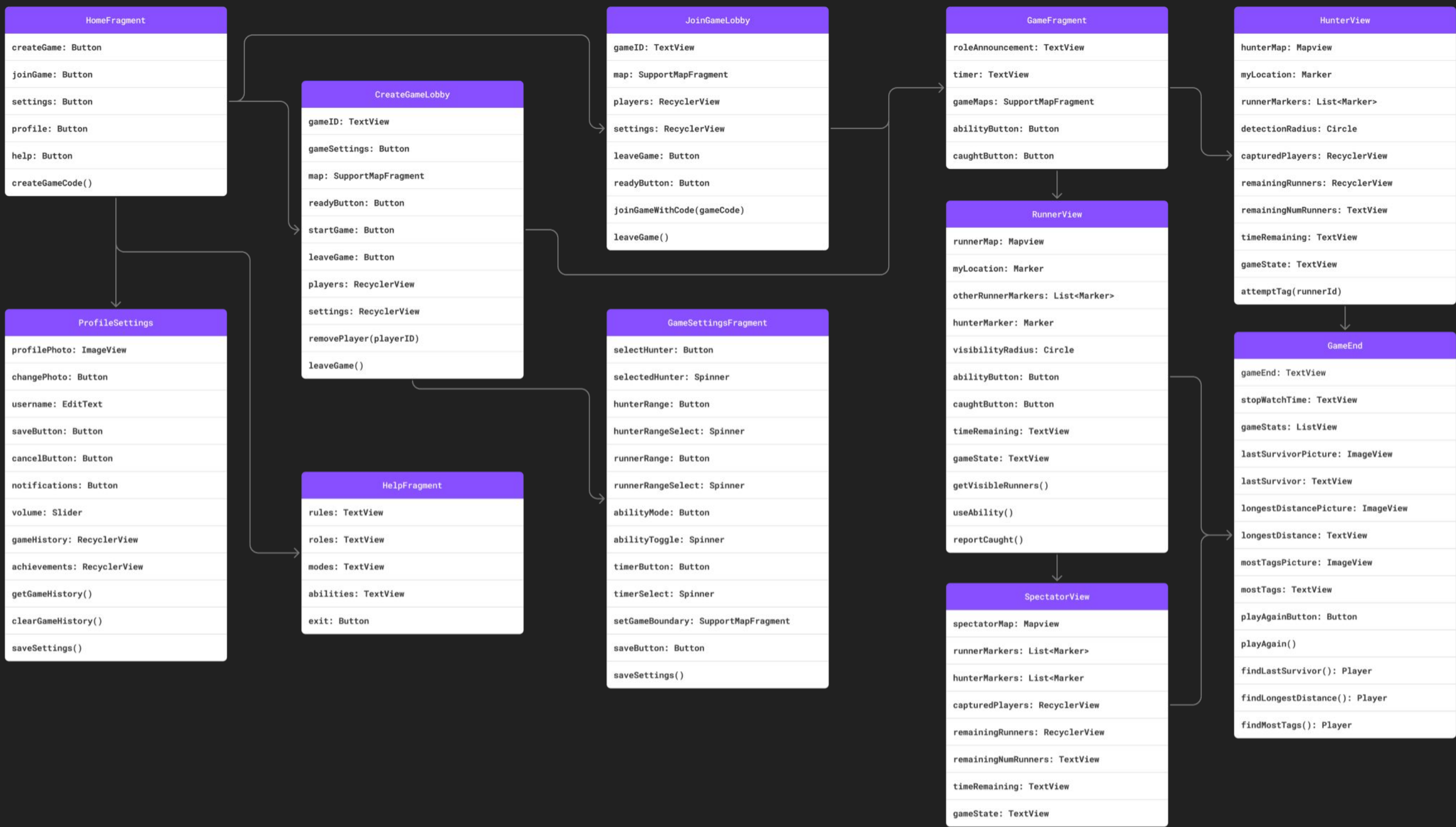


MVVM

# MVVM Diagrams - Model



# MVVM Diagrams - View



# MVVM Diagrams - ViewModel

HomeViewModel
NavigateToLobby: LiveData<Boolean>
NavigateToProfile: LiveData<Boolean>
onPlayClicked()
onJoinClicked()
onSettingClicked()

LobbyViewModel
lobbyCode: LiveData<String>
Players:liveData<List<player>>
gameSettings: LiveData<GameSettings>
readyCount: LiveData<int>
createLobby()
joinLobby(code:String)
setReady(ready:Boolean)
updateSettings(settings:GameSettings)
startGame()

settingViewModel
gameSettings: MutableLiveData<GameSettings>
hunterSelection: LiveData<string>
hunterRange:LiveData<int>
abilitiesEnabled: LiveData<Boolean>
timerMinutes: LiveData<int>
updateHunterMode(mode:string)
updateHunterRange(meters:int)
toggleAbilites(enabled:boolean)
updateTimer(minutes: Int)
saveSetting()

GameEndViewModel
gameOutcome: LiveData<GameOutcome>
finalTime: LiveData<Long>
lastSurvivor: LiveData<Player?>
longestDistance: LiveData<Pair<Player, Float>>
mostTags: LiveData<Pair<Player, Int>>
fullStatistics: LiveData<GameStatistics>
loadGameResults(gameId: String)
calculateAchievements()
resetForNewGame

MapSetupViewModel
boundaryPoints:LiveData<List<LatLng>>
CompletedBoundary: LiveData<polygon>
playersReady: LiveData<Map<string, Boolean>>
readyCount: LiveData<int>
canProceed: LiveData<boolean>
canUndo: LiveData<Boolean>
addBoundaryPoint(point: LatLng)
undoLastPoint()
clearBoundary
saveBoundary()
setPlayerReady()

HunterViewModel
location: LiveData<LatLng>
capturedRunners: LiveData<List<Player>>
remainingRunners: LiveData<List<Player>>
remainingNumRunners: LiveData<Int>
gameState: LiveData<GameState>
gameBoundary: MutableLiveData<GameBoundary>
timeRemaining: LiveData<Long>
tagRunner(runnerId)
updateLocation(latLng: LatLng)
updateRunners()

RunnerViewModel
location: LiveData<LatLng>
captured: LiveData<Boolean>
gameBoundary: MutableLiveData<GameBoundary>
timeRemaining: LiveData<Long>
abilityUsed: LiveData<Boolean>
ability: LiveData<Enum>
otherRunners: LiveData<List<Player>>
remainingNumRunners: LiveData<Int>
updateLocation(latLng: LatLng)
useAbility(ability)

ProfileViewModel
profilePhoto: MutableLiveData<Bitmap>
gameHistory: LiveData<GameID>
username: LiveData<String>
volume: LiveData<Float>
toggleNotification: LiveData<Boolean>

# Threaded Design Diagram

