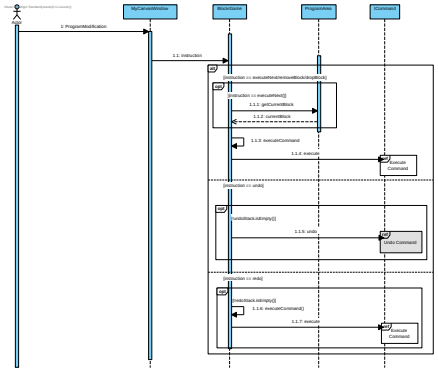
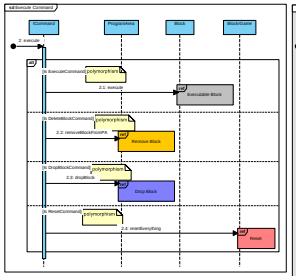
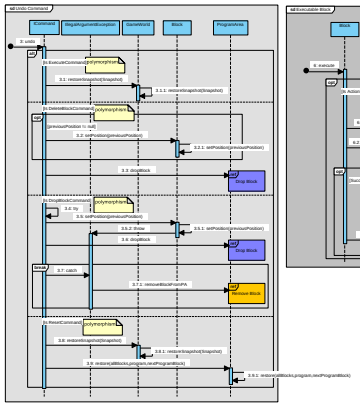
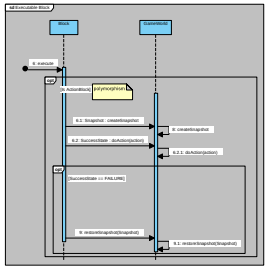
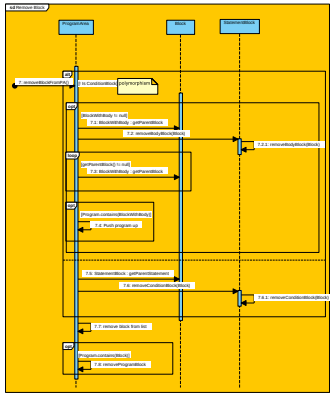
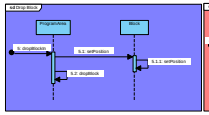

MyCanvasMouse
BlocksGame
ProgramArea
Command
1: ProgramModification
1.1: mMouse
[mmouse == executeNewOrMoveBlock(dragBlock)]
[mmouse == executeNew()]
1.1.1: getCurrentBlock
1.1.2: currentBlock
1.1.3: executeCommand
1.1.4: execute
Execute Command
[mmouse == undo]
1.1.5: undo
Undo Command
[mmouse == redo]
1.1.6: executeCommand()
1.1.7: execute
Execute Command

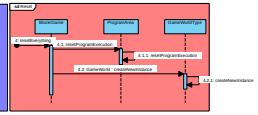

sd Execute Command
ICommand
ProgramArea
Block
BlocksState
2: execute
2.1: execute
Executable Block
2.2: removeBlockFromPA
Remove Block
2.3: dropBlock
Drop Block
2.4: resetEverything
Reset


sd Undo Command
Command
IllegalArgumentException
GameWorld
Block
ProgramArea
1: undo
3.1: restoreSnapshot(Snapshot)
3.1.1: restoreSnapshot(Snapshot)
3.2: setPosition(previousPosition)
3.2.1: setPosition(previousPosition)
3.3: dropBlock
Drop Block
3.4: try
3.5: setPosition(previousPosition)
3.5.1: setPosition(previousPosition)
3.5.2: throw
3.6: dropBlock
Drop Block
3.7: catch
3.7.1: removeBlockFromPA
Remove Block
3.8: restoreSnapshot(Snapshot)
3.8.1: restoreSnapshot(Snapshot)
3.9: restoreAllBlocks(program,newProgramBlock)
3.9.1: restoreAllBlocks(program,newProgramBlock)


sd Executable Block
Block
GameWorld
4: execute
4: ActionBlock
6.1: Snapshot = createSnapshot
6: createSnapshot
6.2: SuccessState = doAction(action)
6.2.1: doAction(action)
SuccessState == FAILURE
9: restoreSnapshot(Snapshot)
9.1: restoreSnapshot(Snapshot)


sd Remove Block
ProgramArea
Block
StatementBlock
7: removeBlockFromPA
7.1: ConditionBlock
7.1.1: setPosition(null)
7.2: removeBodyBlock(Block)
7.2.1: removeBodyBlock(Block)
7.3: getParentBlock()
7.3.1: getParentBlock()
7.4: Push program up
7.5: StatementBlock = getParentStatement()
7.6: removeCondBlockBlock(Block)
7.6.1: removeCondBlockBlock(Block)
7.7: remove block from list
7.8: removeProgramBlock


sd Drop Block
ProgramArea
Block
5: dropBlock
5.1: setPosition
5.1.1: setPosition
5.2: dropBlock


sd Reset
BlocksGame
ProgramArea
GameWorldType
4: resetEverything
4.1: resetProgramExecution
4.1.1: resetProgramExecution
4.2: GameWorld = resetNewInstance
4.2.1: resetNewInstance