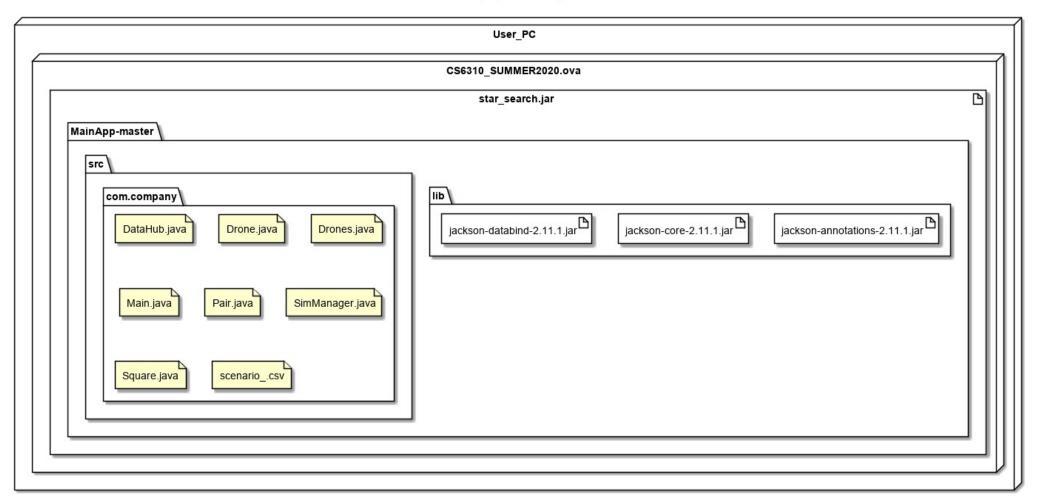
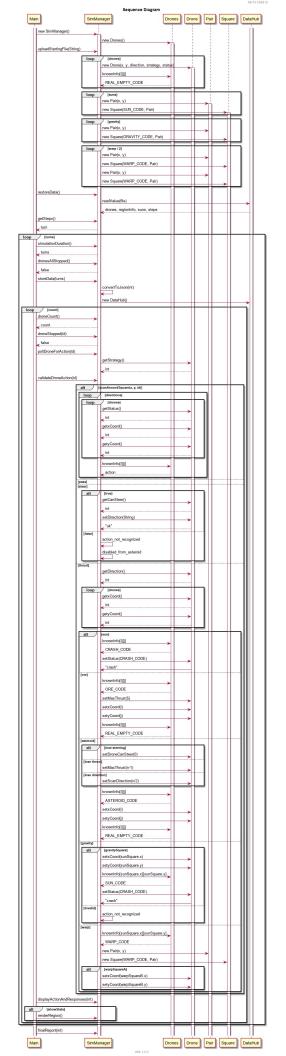
Class Diagram C Main +main(String[])+readCommand(): String C SimManager □ -DEFAULT_WIDTH: int □ -DEFAULT_HEIGHT: CODE: int - GRAVITY_CODE: int - GRAVITY_CODE: int - WARP_CODE: int - CAN_STEER: int - SCAN_DIRECTIONS: int -MAX_DRONES : Int -OK_CODE : int -CRASH_CODE : int -ORIENT_LIST : String[] -randGenerator : Random □ -regionWidth : Integer □ -regionHeight : Integer □ -regionInfo : Integer[][] ☐ -gravityMap : HashMap<Pair, Pair> ☐ -warpMap : HashMap<Pair, Pair> □ -suns : ArravList<Pair> -drones : Drones -trackAction : String □ -trackNewDirection : String □ -trackThrustDistance : Integer -trackMoveCheck : String -trackScanResults : String □ -turnLimit : Integer □ -droneMap : HashMap<Integer, Drone> □ -droneID : int -droneInitXCoord : int -droneInitYCoord : int -droneDirection : String -droneStrategy : int -droneStatus : int -steps : int +SimManager() • +getSteps() : int +uploadStartingFile(String) +simulationDuration() : Integer +droneCount() : Integer +pollDroneForAction(int) +validateDroneAction(int) +scanAroundSquare(int, int, int): String +checkAroundSquareForStar(int, int): int +displayActionAndResponses(int) +renderHorizontalBar(int)+renderRegion() +dronesAllStopped(): Boolean +droneStopped(int): Boolean +finalReport(int) +storeData(int) +convertToJson(int) : String +restoreData()+deleteFile() 0... C Drone C DataHub □ -id : Integer □ -droneX : Integer □ -droneY : Integer □ -droneMaxThrust : Integer o +regionInfo : Integer[][] O +drones : Drones O +suns : List<Square> O +steps : int □ -droneCanSteer : Integer □ -droneScanDirections : Integer +droneMapKeyList : List<Integer> O +droneMapValueList : List<Drone> □ -droneDirection : String □ -droneStrategy : Integer □ -droneStatus : Integer +gravityKeyList : List<Square> +gravityValueList : List<Square> +warpKeyList : List<Square>+warpValueList : List<Squares +Drone(int, int, int, String, int, int) +Drone() 0.. 0. C Drones C Square +numberOfDrones : Integer -coordinate : Pair o +knownInfo : int[][] -DEFAULT_WIDTH : int +Square(int, Pair)+equals(Object): book □ -DEFAULT_HEIGHT : int +Drones() +hashCode(): int C Pair □ -x : Integer □ -y : Integer +Pair(Integer, Integer)+equals(Object) : boolea +hashCode(): int

Deployment Diagram





Use Case Diagram «application» jackson simulation execute star search MainApp include use scenario csv file extends «human»/ view stored data run the next turn user run to the end of the simulation terminate current execution

UML v.2.0