

Contract CO1: View Hint

Operation: checkpointHint(checkpointID)

Cross References: Simple Student Checkpoint

Preconditions: Location is associated with a student account

Postconditions: Route created

Contract CO2: Arrive at Location

Operation: arrival(arrivalStatus)

Cross Reference: Simple Student Checkpoint

Preconditions: Route created

Postconditions: Checkpoint associated with Student marked ready for full info

Contract CO3: Check progress

Operation: appInteraction(progressStatus)

Cross Reference: Simple Student Checkpoint

Preconditions: none

Postconditions: none

Contract CO4: Review Hint

Operation: checkpointInfo(location, checkpointFound)

Cross Reference: Simple Student Checkpoint

Preconditions: Student's location is within location's found radius

Postconditions: None

Contract CO5: See Limited Info

Operation: showCheckpointLimitedInfo(checkpointID)

Cross Reference: Simple Student Checkpoint

Preconditions: Location associated with student not marked complete

Postconditions: Location associated with student not marked complete

Contract CO6: See Full Info

Operation: viewCheckpointFullInfo(checkpointID)

Cross Reference: Simple Student Checkpoint

Preconditions: Student checkpoint marked for full info

Postconditions: None

Contract CO7: View Completed Checkpoint

Operation: confirmationReadPrompt()

Cross Reference: Simple Student Checkpoint

Preconditions: Student displays full checkpoint info

Postconditions: Location associated with Student marked complete

Contract CO8: Confirm Completion

Operation: readConfirm(checkpointID)

Cross Reference: Simple Student Checkpoint

Preconditions: Location associated with Student marked complete

Postconditions: Confirmation associated with location marked done

Contract CO9: Create New Checkpoint

Operation: newCheckpointAvailable(studentID)

Cross Reference: Simple Student Checkpoint

Preconditions: No location currently associated with Student

Postconditions: One location associated with Student

Contract CO10: View New Hint

Operation: viewCheckpointOverview(checkpointID)

Cross Reference: Simple Student Checkpoint

Preconditions: Location associated with Student

Postconditions: None