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Summary

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The RoadController class which includes the main function of our project is where we define each of the villagers and run the tasks. The East_village and West_village classes were designed similarly. Each villager has three attributes: a name, a task number, and the “road” or semaphore they are trying to access to complete their task one at a time. In the East_village and West_village classes we handle the cases where the villagers try to acquire access to the bridge and either fail to or succeed in accessing the road (or semaphore) to complete their task. We alternated between tasks by modding the task number we hard coded for each villager in the RoadController class with the number 3 to choose between the 3 task options we created for villagers on either side of the bridge. Additionally, when the road is occupied, we say the villager’s name and the task they’re completing to let others know that the “road” or semaphore is occupied. When the villager finishes their task, we let everyone know that the “road” is available for use by saying that the villager who was previously using the “road” is returning back to their village. Finally, when all the villagers are finished with their tasks, we let everyone know that all the tasks are completed.

