

Automated Biryani Serving

Functions:

1.) table_init()

- > .slots number of available slots on serving table
- > .capacity current capacity of vessels hold by service container

2.) robot_init()

- > .vessels no of vessels a robot currently have

3.)biryani_ready

- > called when robot i prepared its vessels

inside an infinite loop which ensures waiting until all vessels of robot i are empty

- > first lock() to check if the vessels of a robot are only changed by a single thread.
- > if roboti.vessels==0
return and resume cooking

4.) make

- > inside an infinite loop to ensure that a robot can resume cooking after supplying biryani produced
- > function where robots prepare their biryani and then call biryani_ready

5.) student_in_slot

- > to tell serving table it's presence.
- > Student served the food here and table's capacity reduces by one.

6.) wait_for_slot

- > sleep(arrival time of student)
- in an infinite loop -> ensures student waiting until slot is assigned to him
- > for all tables
if slot is available
slot_assign->student
break
- >call student_in_slot()

7.) ready_to_serve()

- > serves the food to students in assigned slot
- > runs until container becomes empty or all slots become full or no student is waiting.

8.)get()

- > first we assign biryani to table's container i.e. table getting a biryani.
- > Then Table gets ready to serve biryani calls ready_to_serve function.