The planning domain aims to manage chefs to deal with different ingredients and move the meal to cooking table in the shortest time(considering the length of specific cooking tables is different). The orders consists of three types: only burger, only soft drink, burger with soft drink. For this kitchen simulator, we create 4 separate areas which are called bread toaster area, meat heating area, chop board area and combination point.

The burger is combined with one piece of meal, one slice of vegetable and two slices off baked bread in combination point. This means the raw meal, unclean vegetable and bread need to be processed and organized to a complete burger. Raw meal can be baked in bread toaster and unclean vegetable can be cleaned and chopped in chop board. Furthermore, the chefs have their abilities to handle those ingredients in different areas. This comes up with two predicates for chef: busy and not busy. Only one chef is able to working in one specific area and other chefs can pass the area with carrying the ingredients as there is a path on every area. After handling the ingredients, chefs are acquired to put the processed ingredients into the plates which the plates with and without ingredients can be defined as: meat plate, vegetable plate, bread plate and empty plate.

As for orders, there are two states of orders: drinking order and burger order. The completeness of orders are counting down while the orders are proceed and the time is counting as well for the all orders.