

Functional Dependencies

Bartenders(Bartender_id, First_name, Last_name, Employment_type)

FD_{Bartenders} = {Bartender_id → First_name, Bartender_id → Last_name, Bartender_id → Employment_type}

CompletedOrders(Order_id, Bartender_service, Completed_time)

FD_{CompletedOrders} = {Order_id → Completed_time, Order_id → Bartender_service}

EmploymentTypes(Employment_id, Employment_type_desc)

FD_{EmploymentTypes} = {Employment_id → Employment_type_desc}

ItemSupplies(Item_id, Item_name, Item_size, Item_price)

FD_{ItemSupplies} = {Item_id → Item_name, Item_id → Item_size, Item_id → Item_price}

Note: Item name does not determine item size or item price because duplicate items may exist. Although the GUI interface will restrict duplicates, database interaction may introduce duplicate items.

OrderableItems(Item_id, Item_name, Item_price, Available)

FD_{OrderableItems} = {Item_id → Item_name, Item_id → Item_price}

Note: Item name does not determine item price or availability because duplicate items may exist. Although the GUI interface will restrict duplicates, database interaction may introduce duplicate items.

Orders(Order_id, Order_item, Order_time)

FD_{Orders} = {Order_id → Order_item, Order_id → Order_time}

Recipes(Finished_item_id, Supply_item_id, Recipe_amount)

FD_{Recipes} = {(Finished_item_id, Supply_item_id) → Recipe_amount}