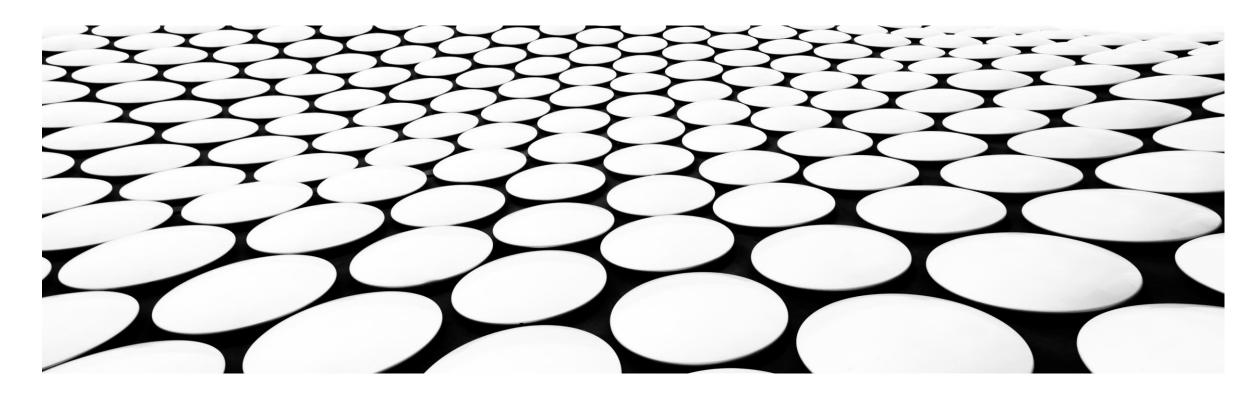
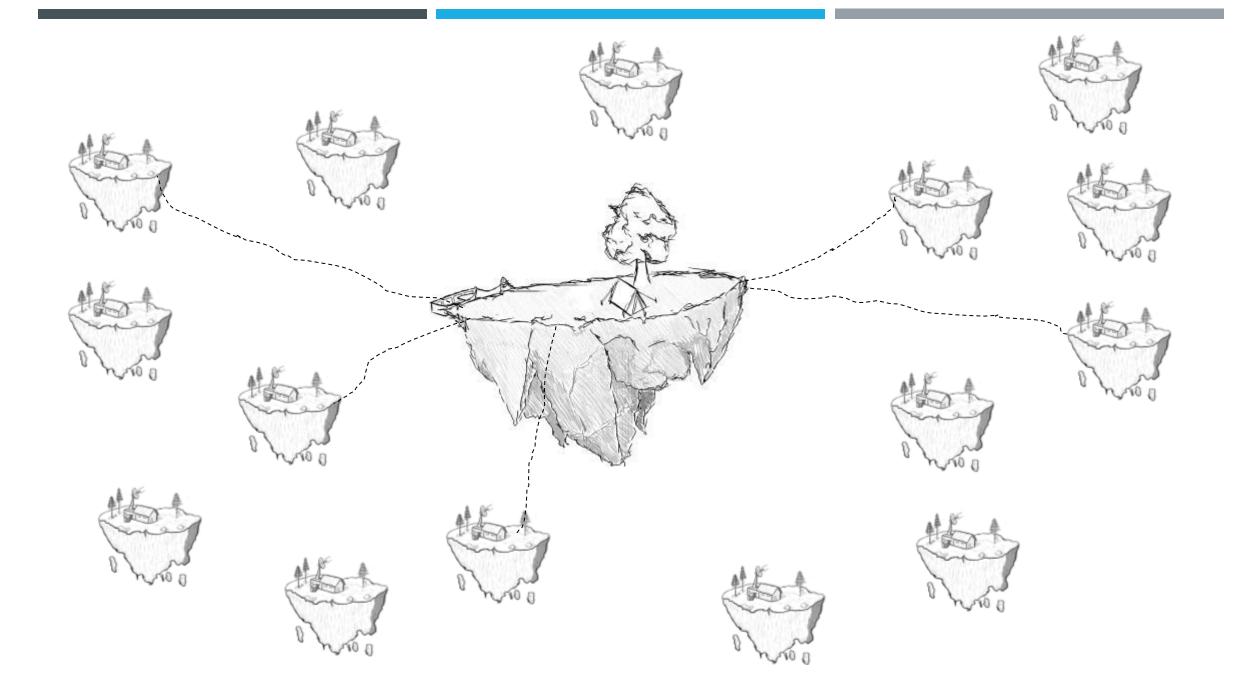
DISTRIBUTED SYSTEM

STUDENT NAME:





SUMMARIZE THE QUESTION

Content:

- 1- 15 small flying islands.
- 2- Big island it's center and contains a lot of facilities and services.
- 3- About 5 small flying islands are connected with the big island by a very narrow bridge.
- 4- Each of the small flying islands has one family consisting of 2 up to 5 members.
- 5- The center island has the mayor of the city.
- 6- Each family has a smart bird and the small island that connect to the center island by bridge have a dog.

Role:

- 1- The narrow bridge can pass only a small dog.
- 2- The mayor knows all the families in his city and where they live.
- 3- Each family knows the other families but they didn't know where they live.
- 4- They can contact by the mayor only.
- 5- The smart bird can fly to the center island and return back to its exact island.
- 6- The smart bird can't fly from a small island to another small island.
- 7- The dogs can pass to the center island and return back but most time not succeeds in their jobs.

SUMMARIZE THE QUESTION

Mayor role:

- 1- each family can send one card to another family at a time.
- 2- The "Card" should include the names of the sender and receiver families and the activity/operation/request the sender would like to inform the receiver family with, and whether the sender family would like to receive a reply from the receiver family or not

The cost of the card:

- 1- The cost is the total cost of each letter in the "Card" content.
- 2- The cost of a letter is 1\$, then a "Card" with 7 letters will cost 7\$.
- 3- Cards contain letters only.
- 4- Cards sent by dogs will cost half the amount of sending them by birds.
- 5- he promised to consider the privacy and security of "Cards" if they were labeled with a specific "Remarkable Phrase".
- 6- The remarkable phrase is included in the cost!

SUMMARIZE THE QUESTION

activities/operations/requests/ information:

- 1- That families needed are limited.
- 2- types of requests are 150.
- 3- requests may include the question of the specific item (a tool, a device, a book, ...).
- 4- The number of items is 3200.

What Alice needs from me:

- 1- designing a communication mechanism according to the aforementioned strategy
- 2- consider all the mayor conditions.
- 3- with the extreme minimum costs.
- 4- You can add extra facilities on family islands and the center island.
- 5- Alice is free to give families a guidelines or manual on how to use your communication mechanism.