KX'S FARM

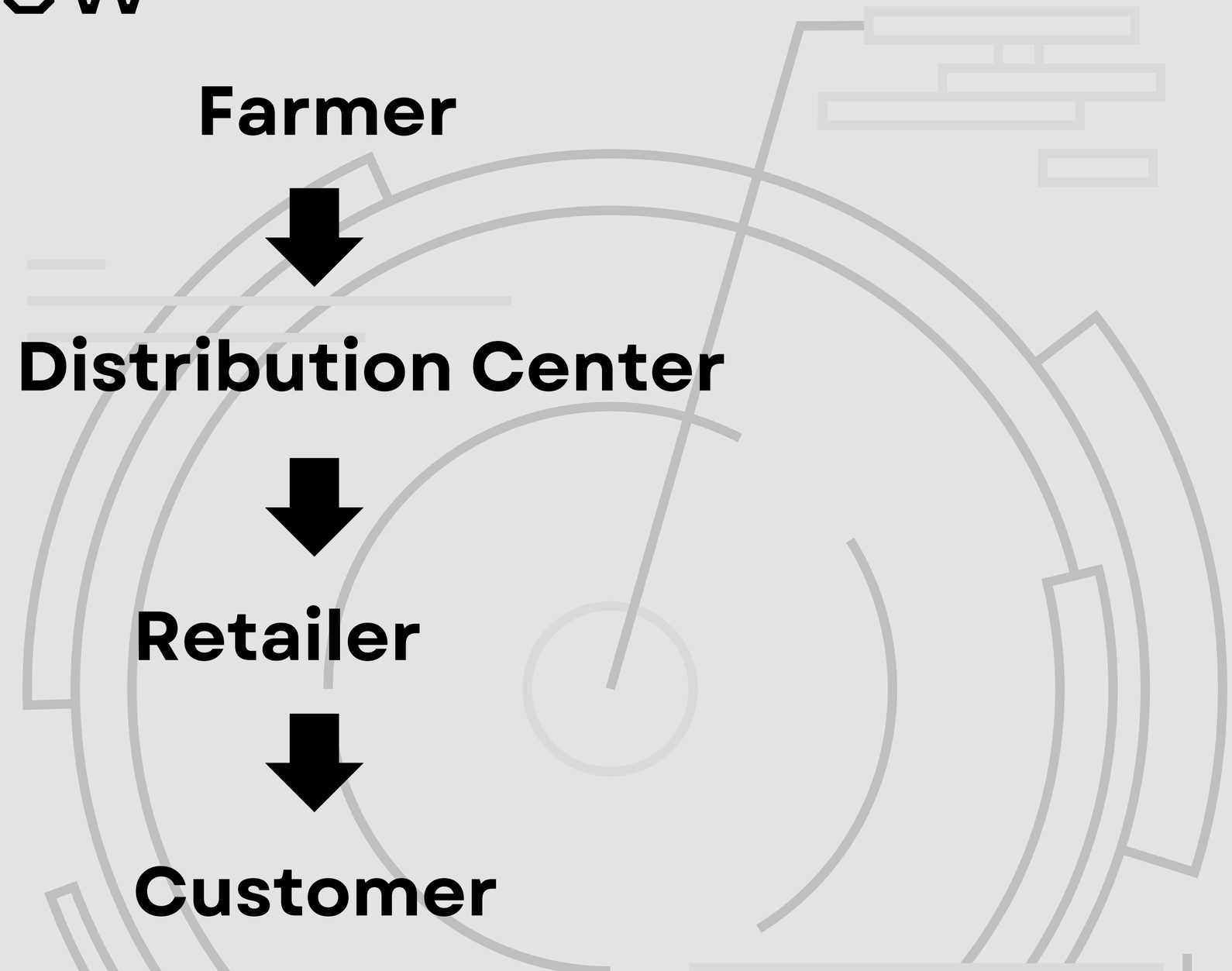
Durian Track and Trace Blockchain Application

Wong Soon Chee
Kaw Kai Xiang
Teoh Jia Hao
Rinisha A/P Naresh Kumar
Yong Man Kei

INTRODUCTION

- **KX's Farm is Durian Track and Trace Blockchain Application**
- **Trace the production of durian starting from the farm until the durian reaches the customer**
- **Main reason for using blockchain:**
  - **Traceable**
  - **Transparent**
  - **Accountable**

WorkFlow



Roles

Owner

1. Deploy contract
2. Assign roles
    a. Add farmer
    b. Add distributor
    c. Add retailer

Farmer

1. Create durian
2. Update date pass durian to distributor

Roles

Distributor

1. Update durian info from farmer
2. Update date pass durian to retailer

Retailer

1. Update durian info from from distributor center
2. Update date of pass durian to customer

Roles

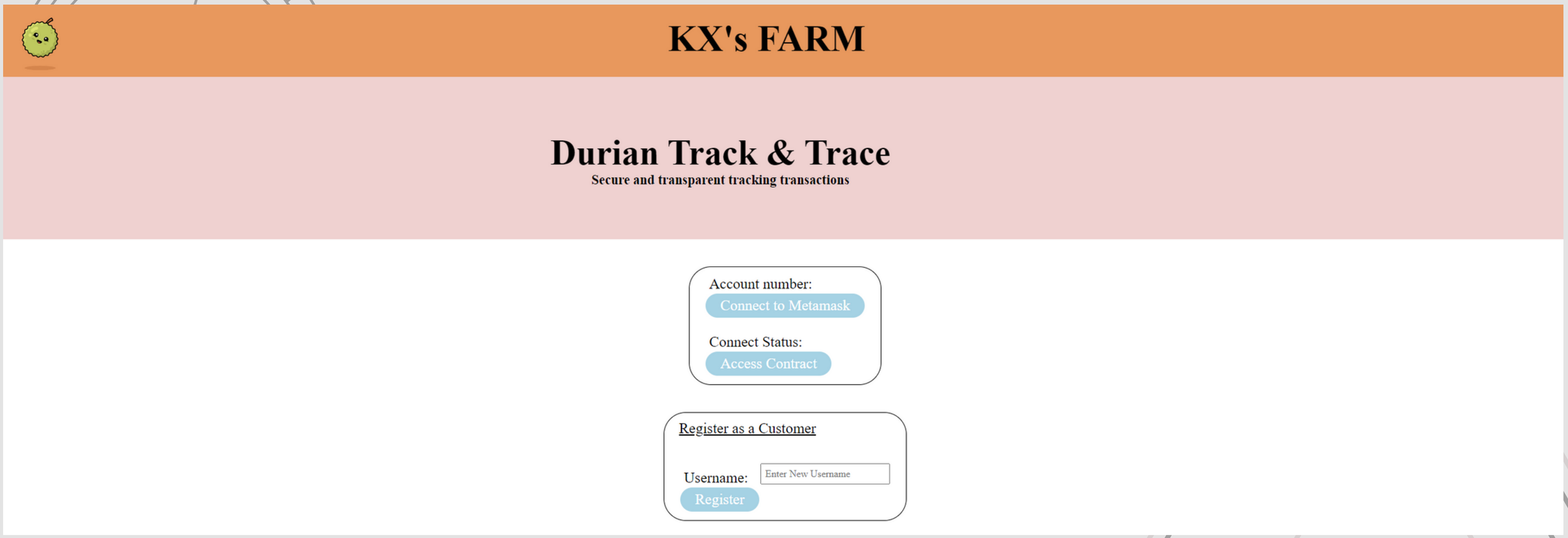
Customer

1. Register as customer
2. Rate durian (taste, fragrance, texture, creaminess, ripeness)
3. Preview durian information

Contract Diagram &
Use Case &
Activity Diagram &
System Architecture

https://app.diagrams.net#G1pkP4yW2ExTvgEHc0yHdmUw0TuWtW7S

User Interface Design



Owner

Assign Role

User Address: Enter User Address

Role: Farmer

Assign Role

Create Farm

Owner: Enter Farm Owner Address

Name: Enter Farm Owner Name

Create Farm

Create Distribution Center

Owner: Enter Distribution Center Owner Address

Name: Enter Distribution Center Name

Create Distribution Center

Create Retail Shop

Owner: Enter Retailer Owner Address

Name: Enter Retailer Name

Create Retail Shop

Farmer

Create Durian

Farm ID: Enter Farm ID

Durian Type: Enter Durian Type

Harvest Date: 03/10/2023

Harvest Time: 05:28 am

Create Durian

Update Date Pass to Distributor

Durian ID: Enter Durian ID

Distribution Center Address: Enter Distribution Center Address

Date Pass to Distribution Center: 03/10/2023

Update Durian

Distribution Center

Update Durian Info from Farmer

Durian ID: Enter Durian ID

Date Received From Farm: 03/10/2023

Update Durian

Update Date Pass to Retailer

Durian ID: Enter Durian ID

Retailer Address: Enter Retailer Address

Date Pass to Retailer: 03/10/2023

Update Date

Retailer

Update Durian Info from Distributor

Durian ID: Enter Durian ID

Date Received From Distribution Center: 03/10/2023

Update Durian

Update Date Pass To Customer

Durian ID: Enter Durian ID

Customer Address: Enter Customer Address

Date Pass to Customer: 03/10/2023

Update Date

Customer

Update Durian for Customer

Durian ID: Enter Durian ID

Date Received From Retailer: 03/10/2023

Update Durian

Rate Durian

Durian ID: Enter Durian ID

Rating Scale

0 - Undefined 1 - Inedible 2 - Bad 3 - Average 4 - Good 5 - Excellent

Taste: Enter Durian Rating Taste

Fragrance: Enter Durian Rating Fragrance

Creaminess: Enter Durian Rating Creaminess

Texture: Enter Durian Rating Texture

Ripeness: Enter Durian Rating Ripeness

Durian Grade: Enter Durian Grade Rating

Comment:

Provide a comment if any

Rate Durian

Durian ID: Enter Durian ID

Get Durian Info

Durian ID:	
Durian type:	
Farm ID:	
Harvest date and time:	
Date pass to distribution center:	
Distribution center ID:	
Date received from farm:	
Date pass to retailer:	
Retailer address:	
Date received from distribution center:	
Date pass to customer:	
Customer address:	
Date received from retailer:	
Taste:	
Fragrance:	
Texture:	
Creaminess:	
Ripeness:	
Grade:	
Comment:	

THANKYOU