1.User Roles

1.1 后台管理员 administrator

1.1.1 Description

他拥有最高权限，负责修改或查找所有用户的数据，所有商品的数据，所有订单的数据。同时，对于一些评分非常低的卖家，可以取消他们的出售资格，我们需要实现后台功能，提供一个UI界面能够查找并修改数据

He has the highest authority and is responsible for modifying or finding all user data, all product data and all order data. At the same time, for some sellers with very low ratings, they can be disqualified from selling. We need to implement back-end functionality to provide a UI interface.

1.1.2 Behavior

He needs to be logged in

The administrator account is generated by the backend, registration is not allowed

For users

He needs to view the user's account information, including id, name, nickname, email, date of birth, date of registration

He needs to modify the user's account information

He needs to modify the authorization level of a user, l1(buyer), l2(buyer and seller), l3(support staff), l4(administrator)

For products

He needs to view the product's form, including name, description, price and image.

He needs to modify the product's form, including name, description, price and image

He needs to delete a product's form

He needs to check all orders

He needs to delete any order

He needs to modify any order i.g. status of order.

中文版：

他需要登录，后台管理员账号由后台生成，不允许注册

他能够查看用户的账号信息，包括id，姓名，昵称，邮箱，生日，注册日期

他能够修改用户的账号信息

他能够删除用户的账号信息

他能够修改某一用户的授权等级，l1(buyer), l2(buyer and seller), l3(support staff), l4(administrator)

他能够查看商品的表单，包括名字，描述，价格，图片

他能够修改商品的表单，包括名字，描述，价格，图片

他能够删除商品的表单

他能够查询所有的订单

他能够删除某一个订单

1.2 客服 support staff

1.2.1 Description

相当于一个低权限的administrator

她负责解答用户的疑惑和处理一些突发事件。她需要能够查找所有用户的数据，所有商品的数据，所有订单的数据，但不允许修改或删除。

equivalent to a low privilege administrator

She is responsible for answering users' queries and dealing with some emergencies. She needs to be able to look up all user data, all product data and all order data, but is not allowed to modify or delete them.

1.2.2 Behavior

He needs to login

Support staff accounts are generated by the back end and registration is not allowed

She needs to view the user's account information, including id, name, nickname, email, birthday, date of registration

She needs to view the product form, including name, description, price, image

<mark>For orders</mark>

He can check all orders

中文版：

他需要登录，客服账号由后台生成，不允许注册

<mark>对用户</mark>

他能够查看用户的账号信息，包括id，姓名，昵称，邮箱，生日，注册日期

<mark>对商品</mark>

他能够查看商品的表单，包括名字，描述，价格，图片

<mark>对订单</mark>

他能够查询所有的订单

1.3 用户 Users

1.3.1 Typical potential user

1.3.1.1 Anna

1.3.1.1.1 Description

A mother of two children who doesn't have a lot of time to browse the site. She has a lot of old toys for children and clothes, she may be interested in cheap kitchen items and has a habit of keeping accounts.

1.3.1.1.1 Behavior

She needs to sign up for an account

She needs to log in

<mark>As a buyer:</mark>

find some open source

She needs a home page with product recommendations based on her browsing history

> [15:09] Zaiqiao Meng sequence recommendation
> [15:09] Zaiqiao Meng Language models to do input autocompletion

She needs to browse by category, or to do an active search by key words

> maybee a filter.

She needs to sort products by price or time on herself

She can add items to her shopping cart or buy them directly

She can check out from the shopping cart screen

She needs to check all the orders that have been purchased

<mark>As a seller:</mark>

She needs to upload the name, description, price and image of the used item she wants to sell, which should be multiple images

She needs to edit the name, description, price and pictures of the items she has uploaded.

She needs to reply to other users' questions in the comments section.

She needs to confirm "shipped" when the item has been sent

She needs to get a rating from the buyer when the item is successfully sold

中午版

一位有两个孩子的母亲，没有很多时间浏览网站，有很多不要的旧玩具和旧衣服，她可能对便宜的厨房用品感兴趣，有记账的习惯。

她需要注册一个账号

她需要登录

作为一个购买者：

她需要一个首页的商品推荐，根据她的历史浏览记录来进行推荐

她需要能根据不同分类浏览商品，或者进行主动的搜索

她需要根据价格或者上架时间来对商品进行排序

她能够把商品添加到购物车，或者直接购买

她能在购物车界面进行结算

她需要查看所有购买过的订单

作为一个卖家：

她需要能够上传想要出售的二手商品的名字，描述，价格和图片，图片应该有多张

她能够修改已上传的商品的名字，描述，价格和图片，图片应该有多张

她需要能在留言区回复其他用户的提问。

她需要在物品寄出后确定"已发货"

她需要在成功出售物品后获得买方的评分

1.3.1.2 Tom

1.3.1.2.1 Description

A recent college graduate, interested in electronics and he is price sensitive. He often simply browse the products and compare prices.

(We want to implement the ability to browse products without logging in, i.e. provide an interceptor for filtering against different URLs)

1.3.1.2.2 Behavior

He needs to register an account

He needs to login

As a purchaser:

She needs to be able to browse the products without logging in.

He needs to be able to browse the products by category or do an active search

He needs to be able to sort the products by price or time on shelf

```
He needs to be able to track an item, keep an eye on the price and
find all the items in his collection in the tracker page.
```

He can add items to the shopping cart or buy them directly

He can check out from the shopping cart screen

一位刚毕业的大学生，对电子产品感兴趣，对价格敏感，（显示的商品能根据价格进行排序，同时可以跟踪某一个商品）他更多的时候可能只是单纯的浏览商品，比对价格。(我们要实现不登陆也能浏览商品的功能，即针对不同的URL，要提供一个拦截器进行过滤)

她需要注册一个账号

她需要登录

他需要能够不登陆也能浏览商品。

他需要能根据不同分类浏览商品，或者进行主动的搜索

他需要根据价格或者上架时间来对商品进行排序

他需要跟踪某一个商品，来持续关注价格，并在tracker界面找到自己收藏的所有商品

他能够把商品添加到购物车，或者直接购买

他能在购物车界面进行结算

1.3.1.3 Jack

1.3.1.3.1 Description

A computer beginner who wants to buy some cheap second-hand books to study. He has a lot of questions to ask, such as the content of the books and whether there are corresponding tutorial websites.

(We want to set up a comments section below the item to make communication between buyer and seller.)

1.3.1.3.2 Behavior

He needs to register an account

He needs to log in

As a purchaser:

He needs to browse products by category or do an active search

He needs to sort the products by price or time on shelf

`He needs to ask questions in the comments section of an item.`

He can add items to the shopping cart or buy them directly

He can check out from the shopping cart screen

一位计算机初学者，想要买一些便宜的二手书学习，有很多问题要咨询，比如书籍的内容，有无对应辅导网站等。（我们要在商品下方设置一个留言评论区，来方便买家和卖家进行交流。）

她需要注册一个账号

她需要登录

作为一个购买者：

他需要能根据不同分类浏览商品，或者进行主动的搜索

他需要根据价格或者上架时间来对商品进行排序

他需要能在一个商品的留言区提问。

他能够把商品添加到购物车，或者直接购买

他能在购物车界面进行结算

1.3.2 Abstract User

Based on the three typical users above, we can distil a general user profile.

User

As a buyer:

Before login:

He needs a home page with product recommendations based on her browsing history

He needs to browse products without logging in.

He needs to browse products by category or do an active search.

He needs to sort products by price or time on himself.

> a filter

After login:

He needs to track an item, keep an eye on the price and find all his favorite items in the tracker page.

He needs to ask questions in the comments section of an item.

He can add items to the shopping cart or buy them directly

He can check out from the shopping cart page.

He needs to confirm that he has "received the item".

He needs to rate the transaction

He needs to check all the orders he has completed

As a seller:

After login:

He needs to upload the name, description, price and picture of the used item he wants to sell.

He needs to edit the name, description, price and pictures of the item he has uploaded, there should be more than one picture

He needs to reply to other users' questions in the comments section.

He needs to confirm "shipped" when the item has been sent

He needs to get a rating from the buyer when the item is successfully sold

中文版

User

As a buyer:

    Before login:

        她需要一个首页的商品推荐，根据她的历史浏览记录来进行推荐

        他需要能够不登陆也能浏览商品。

        她需要能根据不同分类浏览商品，或者进行主动的搜索

        她需要根据价格或者上架时间来对商品进行排序

    After login:

        他需要跟踪某一个商品，来持续关注价格，并在tracker界面找到自己收藏的所有商品

        他需要能在一个商品的留言区提问。

        他能够把商品添加到购物车，或者直接购买

        他能在购物车界面进行结算

        他需要确定"已收到货"

        他需要对本次交易进行评价

        他需要查看所有购买过的订单

As a seller

    After login:

        她需要能够上传想要出售的二手商品的名字，描述，价格和图片，图片应该有多张

        她能够修改已上传的商品的名字，描述，价格和图片，图片应该有多张

        她需要能在留言区回复其他用户的提问。

        她需要在物品寄出后确定"已发货"

        她需要在成功出售物品后获得买方的评分

2.User Story

User Story List

2.1 后台用户管理模块 Administrator User Management Module

2.2 后台用户授权模块 Administrator User Authorization Module

2.3 后台产品管理模块 Administrator Product Management Module

2.4 后台订单管理模块 Administrator Order Management Module

2.5 用户注册模块 User Registration Module

2.6 用户登录模块 User Login Module

2.7 用户首页模块 User Home Page Module

2.8 用户查找模块 User Search Module

2.9 用户商品模块 User Product Module

2.10 用户评论区模块 User comment section module

2.11 用户直接购买模块 User Direct Purchase Module

2.12 用户购物车模块 User Shopping Cart Module

2.13 用户订单模块 User order module

2.14 用户评分模块 User rating module

2.15 用户上传商品模块 User Upload Product Module

2.16 用户修改商品模块 User modified product module

2.17 用户历史浏览记录模块 User history module

2.18 用户跟踪商品模块 User tracker module

2.1 后台用户管理模块 Administrator User Management Module

Priorities: must

Length: 2 ideal day

Description:

Create a user Management page

View all users' information

Modify user's information

Delete user's information

User Management UI界面

查看所有用户的信息

修改用户的信息

删除用户的信息

Test:

能够查看用户信息

能够修改用户信息，并在数据库和网站页面上进行更新

能够删除用户信息，并在数据库和网站页面上进行更新

Ability to view user information

Ability to modify user information and update it in the database and on the website pages

Ability to delete user information and update it in the database and on the website pages

2.2 后台用户授权模块 Administrator User Authorization Module

Priorities: must

Length: 2 ideal day

Description:

The ability to have different levels of authorization for different user accounts, so that users with equal privileges cannot view pages specific to users with higher privileges. l1(buyer) allows only the purchase of items, the upload page is not displayed. l2(buyer and seller) allows the purchase and sale of items, displaying all pages of the user. l3(support staff) displays all pages of the back office, but only allows searching, modifying and deleting. l4(administrator) displays all pages of the back office, allowing searching, modifying and deleting.

能够对不同用户账号进行不同级别的授权，等权限的用户无法浏览高权限用户特有的页面，l1(buyer)只允许购买物品，上传商品的页面不显示，l2(buyer and seller)允许购买和出售商品，显示用户的全部页面。l3(support staff)显示后台的全部页面，但只允许查找，不允许修改。l4(administrator)显示后台的全部页面，允许查找，修改，删除。

Test:

能够给不同的账号不同的权限，修改数据库中对应的权限字段，并调整UI界面

Ability to give different permissions to different accounts, modify the corresponding permission fields in the database, and adjust the UI interface

Administrator User Authorization Module

in list to do

Description Edit

Priorities: must

Length: 2 ideal day

Description:

The ability to have different levels of authorization for different user accounts, so that users with equal privileges cannot view pages specific to users with higher privileges. l1(buyer) allows only the purchase of items, the upload page is not displayed. l2(buyer and seller) allows the purchase and sale of items, displaying all pages of the user. l3(support staff) displays all pages of the back office, but only allows searching, modifying and deleting. l4(administrator) displays all pages of the back office, allowing searching, modifying and deleting.

☑ Checklist Delete

0%

☐ Ability to give different permissions to different accounts, modify the corresponding permission fields in the database, and adjust the UI interface

2.3 后台产品管理模块 Administrator Product Management Module

Priorities: must

Length: 1 ideal day

Description:

UI interface

View all products

Modify product

Delete product

UI界面

查看全部产品

修改产品

删除产品

Test:

Ability to view, modify, delete all products and provide UI

能够查看，修改，删除所有产品，并提供UI界面

Administrator Product Management Module

in list to do

Description   Edit

Priorities: must

Length: 1 ideal day

Description:

UI interface

View all products

Modify product

Delete product

Checklist   Delete

0%

☐ Ability to view, modify, delete all products and provide UI

Add an item

2.4 后台订单管理模块 Administrator Order Management Module

Priorities: must

Length: 1 ideal day

Description:

UI interface

View all orders

Delete an order

Find a specific order by order number

UI界面

查看所有订单

删除订单

根据订单号查找特定订单

Test:

Ability to view, modify, delete all orders and provide UI

Administrator Order Management Module

in list to do

Description Edit

Priorities: must

Length: 1 ideal day

Description:

UI interface

View all orders

Delete an order

Find a specific order by order number

Checklist Delete

0%

☐ Ability to view, modify, delete all orders and provide UI

Add an item

2.5 用户注册模块 User Registration Module

Priorities: must

Length: 1 ideal day

Description:

The user fills in the registration form, sets up the account, nickname, name, email, password and delivery address. The input is also checked for content and format.

用户填写注册表单，设置账号，昵称，姓名，邮箱，密码和收货地址。同时对输入内容和格式进行校验。

Test:

The email format must be correct and the password must meet certain requirements

邮箱格式要正确，密码要满足一定要求

2.6 用户登录模块 User Login Module

Priorities: must

Length: 1 ideal day

Description:

Users enter their account number and password to log in

用户输入账号和密码进行登录

Test:

correct password for successful login

密码正确才能登录成功

2.7 用户首页模块 User Home Page Module

context recommendation

Priorities: must

Length: 2 ideal day

Description:

A user home page containing a list of recommended products based on the user's browsing history and a navigation bar that allows the user to browse different categories of products

用户首页，包含根据用户历史浏览记录生成的推荐商品列表和一个导航栏，可以让用户浏览不同种类的商品

Test:

Correct display of recommended products and the ability to switch between product categories in the navigation bar

正确的显示推荐商品，并能在导航栏切换商品种类

User Home Page Module

in list to do

Description   Edit

Priorities: must

Length: 2 ideal day

Description:

A user home page containing a list of recommended products based on the user's browsing history and a navigation bar that allows the user to browse different categories of products

Checklist   Delete

0%

☐ Correct display of recommended products and the ability to switch between product categories in the navigation bar

Add an item

2.8 用户查找模块 User Search Module

Priorities: must

Length: 1 ideal day

Description:

Allows users to enter keywords to search, supports fuzzy queries

允许用户输入关键字进行查找，支持模糊查询

> simple front-end technology

Test:

Ability to search for items correctly and display

能正确的查询商品，并显示

User Search Module
in list to do

Description   Edit

Priorities: must

Length: 1 ideal day

Description:

Allows users to enter keywords to search, supports fuzzy queries

Checklist   Delete

0%

☐ Ability to search for items correctly and display

Add an item

2.9 用户商品模块 User Product Module

Priorities: must

Length: 1 ideal day

Description:

A specific product page showing the name, description and remaining quantity of an item.

具体的商品页面，显示一个商品的名字，描述和剩余数量。

Test:

Ability to search for items correctly and display

能正确的显示商品相关信息

User Product Module

in list to do

Description Edit

Priorities: must

Length: 1 ideal day

Description:

A specific product page showing the name, description and remaining quantity of an item.

Checklist Delete

0%

☐ Ability to search for items correctly and display

Add an item

2.10 用户评论区模块 User comment section module

Priorities: should

Length: 2 ideal day

Description:

Show reviews from other users and sellers on the product page and be able to write your own reviews

在商品页面中显示其他用户和卖家的评论，并能写自己的评论

Test:

Correct display of comment information

能正确的显示评论信息

2.11 用户直接购买模块 User Direct Purchase Module

Priorities: must

Length: 1 ideal day

Description:

Click on the buy button on the product page to jump directly to the payment page. If the product has 0 quantity remaining, the purchase will not be allowed and the buy button will not be displayed.

在商品页面点击购买按钮，直接跳转到付款页面，如果产品剩余数量为0，则不允许购买，不显示购买按钮。

Test:

The product can be purchased correctly and jump to the payment page, if the product has 0 quantity left, the purchase is not allowed and the buy button is not displayed.

能正确的购买产品，并跳转到付款页面，如果产品剩余数量为0，则不允许购买，不显示购买按钮。

User Direct Purchase Module
in list to do

Description Edit

Priorities: must

Length: 1 ideal day

Description:

Click on the buy button on the product page to jump directly to the payment page. If the product has 0 quantity remaining, the purchase will not be allowed and the buy button will not be displayed.

☑ Checklist   Delete

0% �_____

☐ The product can be purchased correctly and jump to the payment page, if the product has 0 quantity left, the purchase is not allowed and the buy button is not displayed.

Add an item

2.12 用户购物车模块 User Shopping Cart Module

Priorities: should

Length: 2 ideal day

Description:

Clicking Add to Cart on the product page will add the product to the shopping cart. If the product has 0 quantity remaining, it will not be allowed to be added to the cart and the Add to Cart button will not be displayed.

When entering the cart page, it will first check if the products in the cart are still in stock, if an item is out of stock, the user will be prompted to delete the item, otherwise the checkout button will not be allowed to be clicked.

You can browse all the items that have been added to the shopping cart and can delete unwanted items.

Click on the checkout button to be redirected to the payment page

在商品页面点击加入购物车，就会把产品加入购物车中，如果产品剩余数量为0，则不允许加入购物车，不显示加入购物车按钮。

进入购物车页面，首先会检查购物车内的商品是否还有库存，如果某件商品没有库存了，会提示用户把该商品删掉，否则不允许点击结账按钮。

可以浏览所有已加入购物车的商品，并能删除不想要的商品。

点击结账按钮跳转到付款页面

Test:

Correctly check the remaining stock of an item, be able to calculate the total amount and go to the payment page.

正确检查商品剩余库存，能计算总金额，并进入付款页面。

User Shopping Cart Module

in list to do

Description   Edit

Priorities: should

Length: 2 ideal day

Description:

Clicking Add to Cart on the product page will add the product to the shopping cart. If the product has 0 quantity remaining, it will not be allowed to be added to the cart and the Add to Cart button will not be displayed.

When entering the cart page, it will first check if the products in the cart are still in stock, if an item is out of stock, the user will be prompted to delete the item, otherwise the checkout button will not be allowed to be clicked.

You can browse all the items that have been added to the shopping cart and can delete unwanted items.

Click on the checkout button to be redirected to the payment page

Checklist   Delete

0%

☐ Correctly check the remaining stock of an item, be able to calculate the total amount and go to the payment page.

Add an item

2.13 用户订单模块 User order module

Priorities: must

Length: 1 ideal day

Description:

After successful payment, a corresponding order is generated and displayed on the order page.

The seller can also see the order and confirm delivery

The buyer can confirm receipt of the goods

在成功付款后，生成对应的订单，显示在订单页面上。

卖方也能看到订单，并确定发货

买方可以确定收货

Test:

Display orders correctly and allow buyer and seller to interact

正确显示订单，并允许买方和卖方进行交互

2.14 用户评分模块 User rating module

Priorities: Could

Length: 2 ideal day

Description:

Allowing the buyer and seller to score this transaction after the receipt is confirmed, the score will affect the credit score of both parties. If a user's credit score is too low, they may not be allowed to sell the item

允许买方和卖方在确定收货后，对本次交易进行评分，分数将影响双方的信用分。如果某用户的信用分过低，可能不被允许出售物品

Test:

根据评分正确的计算双方的信用分。

The credit score for both parties is correctly calculated based on the score.

⌨ **User rating module**
in list to do

≡ **Description** Edit

Priorities: Could

Length: 2 ideal day

Description:

Allowing the buyer and seller to score this transaction after the receipt is confirmed, the score will affect the credit score of both parties. If a user's credit score is too low, they may not be allowed to sell the item

☑ **Checklist** Delete

0%

☐ The credit score for both parties is correctly calculated based on the score.

Add an item

2.15 用户上传商品模块 User Upload Product Module

Priorities: must

Length: 1 ideal day

Description:

Allows users to upload information about an item as a seller

允许用户以卖方身份上传商品的信息

Test:

Users are able to upload items correctly

用户能正确的上传商品

2.16 用户修改商品模块 User modified product module
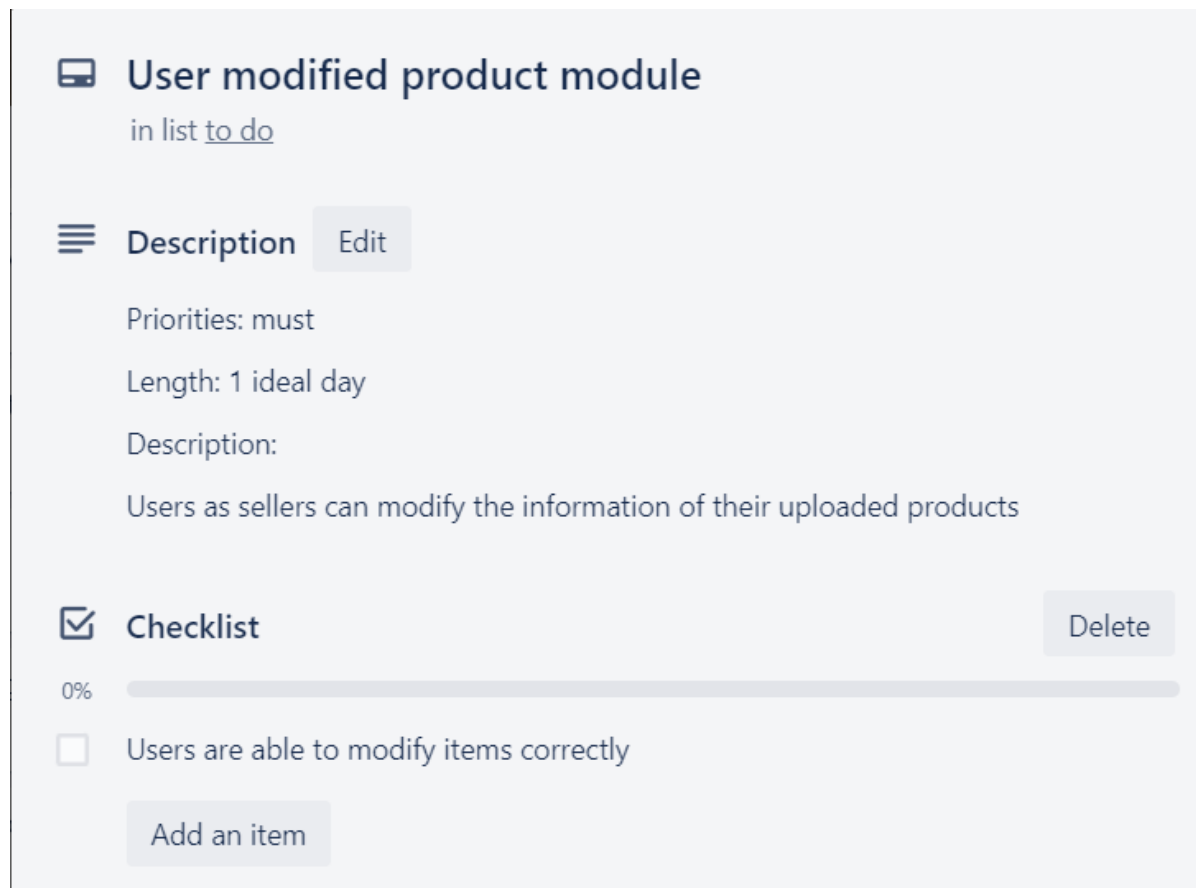
Priorities: must

Length: 1 ideal day

Description:

Users as sellers can modify the information of their uploaded products

用户作为卖家能修改自己上传的商品信息

Test:

Users are able to modify items correctly

用户能正确的修改商品

2.17 用户历史浏览记录模块 User history module

Priorities: could

Length: 2 ideal day

Description:

Save the items previously viewed by the user and display them on a specific page

保存用户之前浏览过的商品，并在特定的页面显示

Test:

Correct display of history

正确的显示历史记录

2.18 用户跟踪商品模块 User tracker module

Priorities: could

Length: 1 ideal day

Description:

Users can track their favourite items and display them on specific pages

用户能跟踪自己喜欢的商品，并在特定的页面显示

Test:

Ability to track and untrack items and show all tracked items on the tracker page

能跟踪商品，也能取消跟踪，在跟踪页面中显示所有被跟踪的商品

3.Iteration Release Plan

3.1 Priority List

All the stories with priority are as followings:

Administrator User Authorization Module	must	2
Administrator Product Management Module	must	1
Administrator Order Management Module	must	1
User Registration Module	must	1
User Login Module	must	1
User Home Page Module	must	2
User Search Module	must	1
User Product Module	must	1
User comment section module	should	2
User Direct Purchase Module	must	1
User Shopping Cart Module	should	2
User order module	must	1
User rating module	could	2
User Upload Product Module	must	1
User modified product module	must	1
User history module	could	2
User tracker module	could	1

Graph1: Priority List

3.2 Iteration List

We have four iterations with two releases:

Iteration	Story Name	Total Effort
1	Administrator User Management Module	6
	Administrator User Authorization Module	
	Administrator Product Management Module	
	Administrator Order Management Module	
2	User Registration Module	8
	User Login Module	
	User Home Page Module	
	User Search Module	
	User Product Module	
	User comment section module	
3	User Direct Purchase Module	6
	User Shopping Cart Module	
	User order module	
	User rating module	
4	User Upload Product Module	5
	User modified product module	
	User history module	
	User tracker module	

Version 1: including iteration 1 and 2 (administrator system and mall system)

Version 2: including iteration 3 and 4 (buyer and seller system)

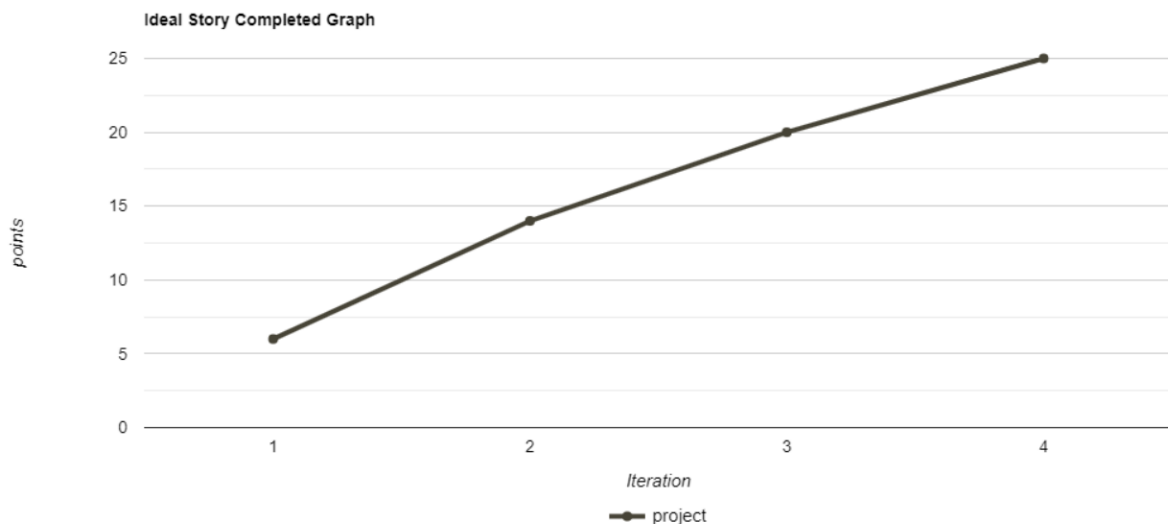# 4.Ideal Story Completed Graph And Ideal Burndown Chart

>Our target is 25 points in 4 iterations.
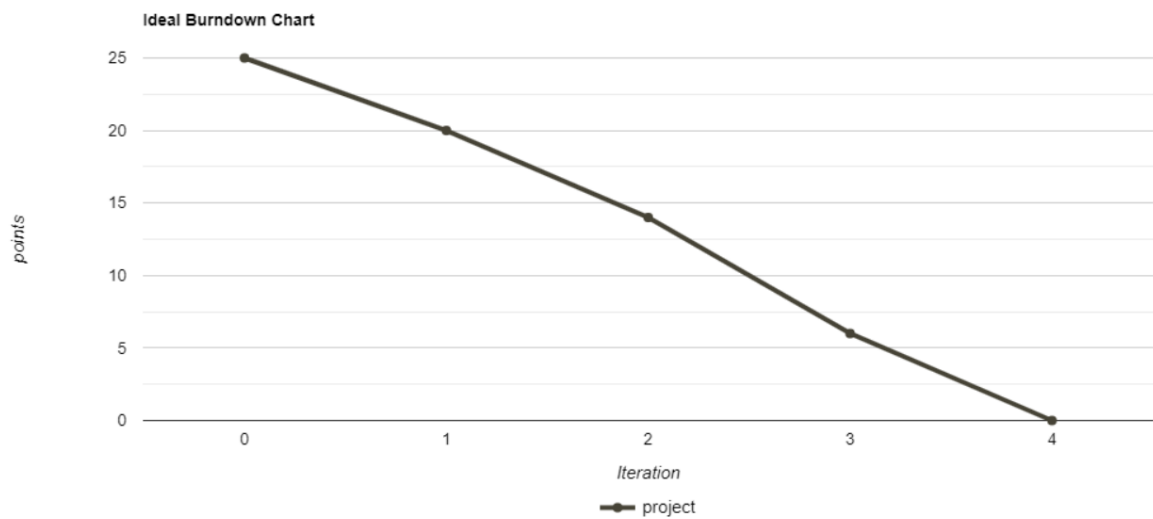
>Velocity is 6.25

4.1 Ideal Story Completed Graph

Gragh3: Ideal Story Completed Graph

4.2 Ideal Burndown Chart

Gragh4: Ideal Burndown Chart

name	Xianyu	eBay	Gumtree
product range	Household goods, electronics, transport, a wide range of coverage	Fashion products, car accessories, household goods, electronics	Household g car accesso electronics, additional information finding a jol renting an apartment,
Transaction format	Order and pay online	Auction mode with online payment support	Online paym not support and needs t made by a t party platfo after communica between the buyer and t

name	Xianyu	eBay	Gumtree
buyer-seller interaction	Support direct text or voice communication between buyers and sellers on the platform	We can communicate via email or phone	Support for or telephon communica...
personalized recommendations	Provide personalised user-based recommendations	Provide personalised user-based recommendations	Provide personalise user-based recommend...