Testing Report

UMBC Market

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UMBC Market
Testing Report

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1. Introduction

Testing is vital for delivering a product that is consistent and accurate.

1.1 Purpose of This Document

This document serves as a report on the methods and results of the testing process used by the UMBC Market production team to verify the success of the UMBC Market application in meeting the requirements defined by production team and the project client. The document will explain the testing methodology and interpret the test results in terms of compliance with requirements.

1.2 References

Use cases from the UMBC Market System Requirements Specification (SRS) document

2. Testing Process

2.1 Description

Unless otherwise specified in project repository commit comments, prior to each commit by a production team member, that team member verified, through testing of components, the good working condition of the UMBC Market application. If a commit to the repository was made with known errors, the errors were strictly specified in the commit notation, other project team members were notified, and the error was assumed to be handled immediately (or before continued work on other components) by another team member.

Formal testing was performed by project team member Sam Leung. The formal testing was performed by going through the use cases explained in the SRS documentation and testing for compliance and success. It was verified that each product component worked as intended. With each test, test conditions were satisfied.

2.2 Testing Sessions

The following table contains information regarding each formal test session executed.

Date	Location	Time Started	Time Ended	Performed By	Use Cases
11/18/2016	Walker Avenue	10:30 AM	11:00 AM	Cory Ferrier and Zachary Robinson	3.2.2, 3.2.1

11/28/2016	Commons First Floor	2:00 PM	4:00 PM	Wesley Chiou and Seth Jenkins	3.2.3, 3.2.4, 3.2.5
11/30/2016	AOK Library	11:00 AM	1:30 PM	Sam Leung	3.2.6, 3.2.7, 3.2.8

2.3 Impressions of the Process

Overall, our testing methods, including a majority of informal, but consistent testing, and formal use case testing, were very successful. By making sure that the meat of the product worked first before testing the more detailed aspects of it, we saved time. Through the testing of the use cases, we were able to progress consistently. We were able to better our product by having a goal of satisfying all use cases after verifying that the critical aspects of the application were in working order.

The best modular unit of the application is the listings unit, comprised of the following files: api/listings.js, ui/listings.js, and listings.html. These three files are some of the oldest of the application and have gone through significant modification. Because of our informal testing process, a large number of modifications results in a large amount of testing, and so this code is virtually error free and known to satisfy its requirements.

The worst modular unit of the application is the error detection unit, comprised of just one file: errorDisplay.js. It is in the worst condition for the same reason that the listings unit is in the best condition: the level of informal testing. This unit is the most recently added unit to the application, and so has gone through the least amount of informal testing.

3. Test Results

Testing was broken down into equivalence partitions and their corresponding boundary cases were tested. Valid data was used to test the core functions of the software while missing and invalid data was used to check error detection.

3.1 Testing Suite

The following suite defines formal tests executed, each associated with a project use case.

Use Case	**Registering an Account**
Valid Situation	User initiates registration and enters valid information.

Invalid Situation	User initiates registration and enters invalid information.
Purpose	To register an account with the Market Application.
Expected Results for Valid Situation	Account is created, account information is stored, and user is logged into the system with the account.
Expected Results for Invalid Situations	User is informed of error.
Boundary Conditions	Invalid registration information results in error message.

Use Case	**Logging into an Account**
Valid Situation	User attempts to log in with valid account information
Invalid Situation	User attempts to log in with invalid account information
Purpose	To test whether or not login system works
Expected Results for Valid Situation	User is logged in successfully.
Expected Results for Invalid Situations	User is informed of error.
Boundary Conditions	Invalid login information results in error message.

Use Case	**Listing a Product or Service**
Valid Situation	User is logged in and attempts to create a listing for a product or service with valid information
Invalid Situation	User attempts to create a listing for a product or service with invalid information
Purpose	To test whether or not a user is able to create a listing
Expected Results for Valid Situation	Listing is created and stored in the database
Expected Results for	User is informed of error.

Invalid Situations	
Boundary Conditions	Error due to invalid information for the listing

Use Case	**Editing or Removing a Listing**
Valid Situation	User is logged in and chooses to modify or remove one of their listings
Invalid Situation	User attempts modify the listing with invalid information such as having missing fields
Purpose	To test whether or not a user is able to modify or remove their listing
Expected Results for Valid Situation	Listing is updated in or removed from the database
Expected Results for Invalid Situations	User is informed of error
Boundary Conditions	Error due to invalid information for the listing

Use Case	**Marking a Listing Complete**
Valid Situation	User is logged in and chooses to mark a listing as complete
Purpose	To test whether or not a user is able to update a listing as completed
Expected Results for Valid Situation	Listing is updated in the database as complete.

Use Case	**Searching the Market**
Valid Situation	User inputs a search term into the search bar and submits it
Purpose	To test whether or not the search works as intended and is able to pull up related posted listings
Expected Results for	Posted listings that match the search term are shown on the page.

Valid Situation	A message is shown if no items found.

Use Case	**Contacting a seller with an initial offer**
Valid Situation	User is logged in and chooses a listing. The user then creates a message and then sends the message.
Purpose	To test whether or not a user is able to send and receive message to and from other users.
Expected Results for Valid Situation	A message is sent and received on the other end in their mailbox.

Use Case	**Managing Messages**
Valid Situation	User is logged in and attempts view or reply to a message
Purpose	To test whether or not a user is able view or reply to a message
Expected Results for Valid Situation	The messages can be viewed and replied to by the user

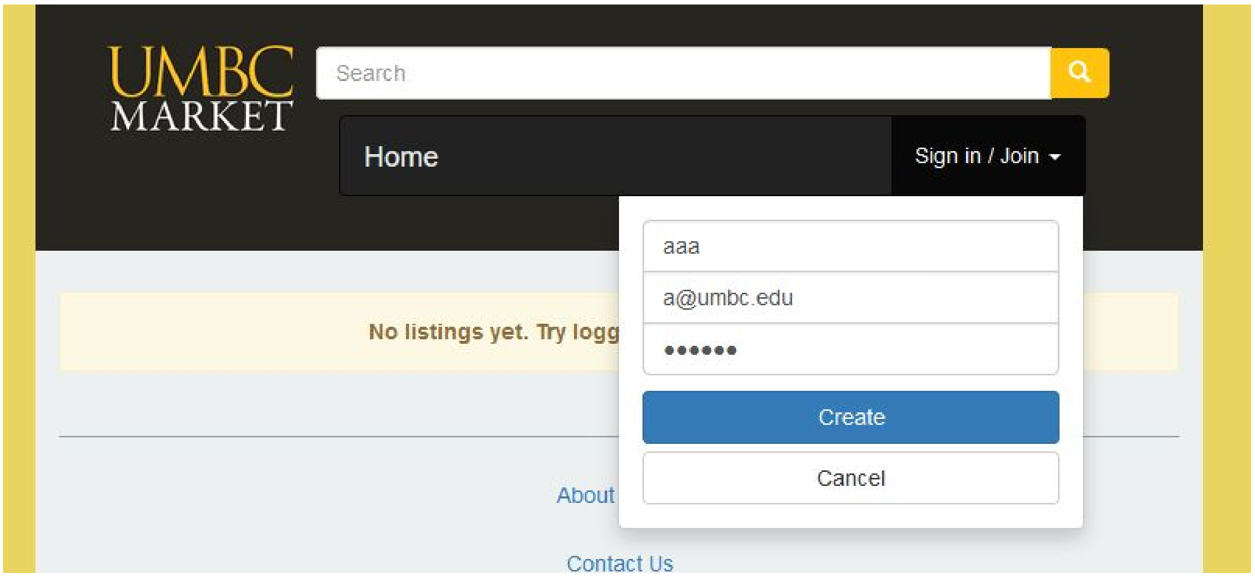
3.2 Test Results

Below, testing results are displayed pictorially:

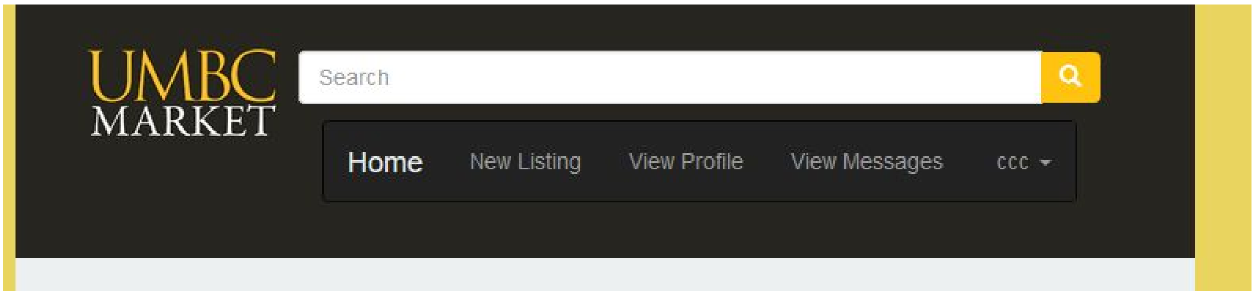
3.2.1 Use Case: Registering an Account

Conducted by: Cory Ferrier

Valid registration information

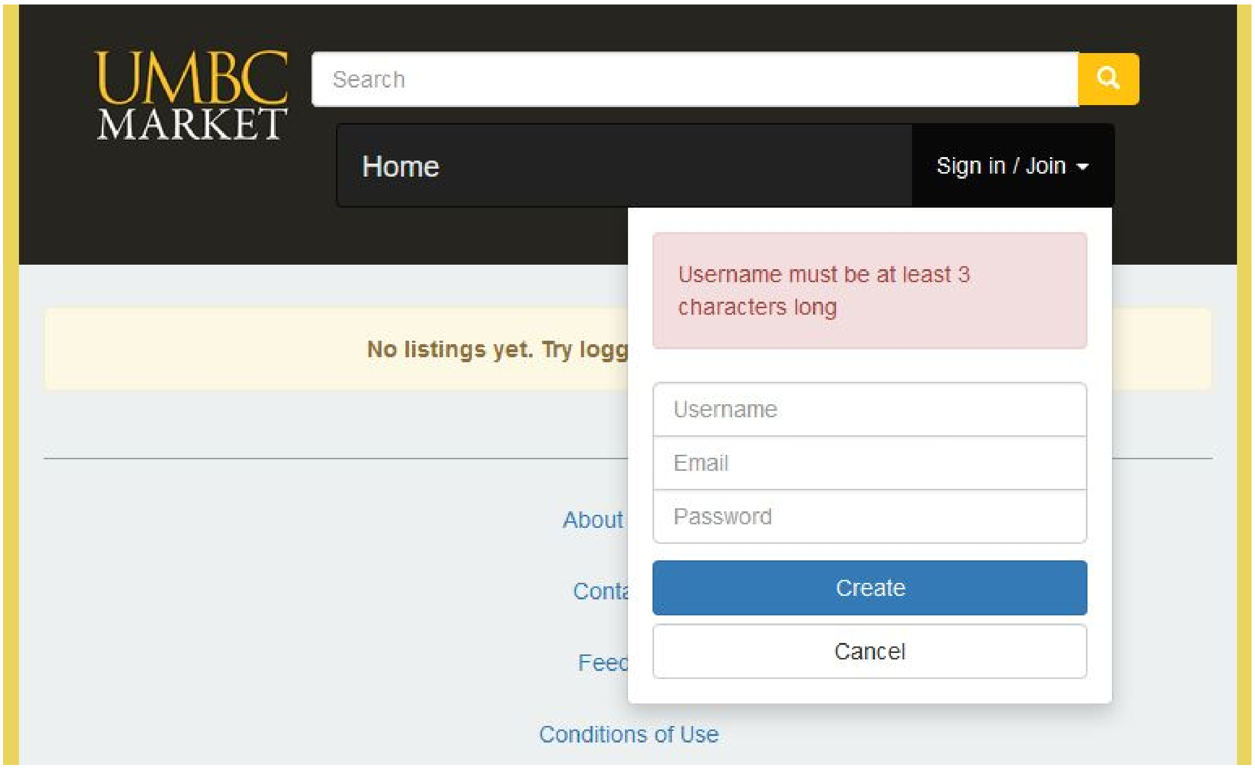


Registration screen



Site showing user logged in after valid registration

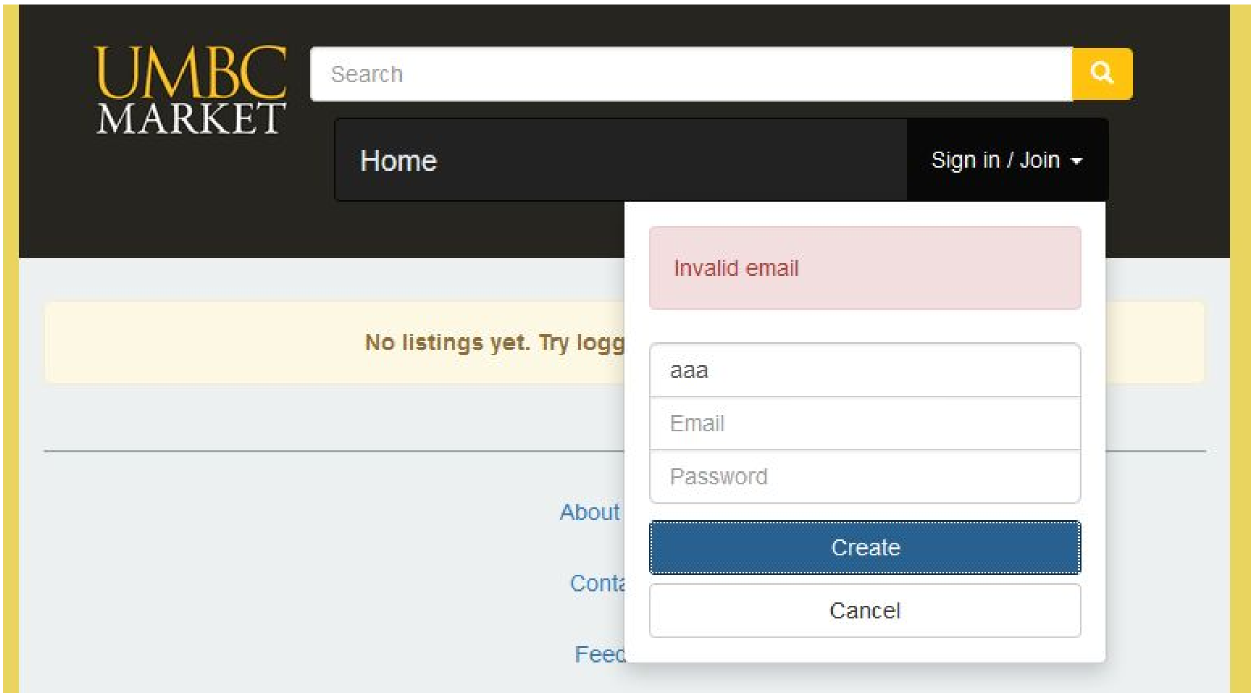
Invalid registration information



Username must be at least 3 characters long

No listings yet. Try logg

Error from missinginput



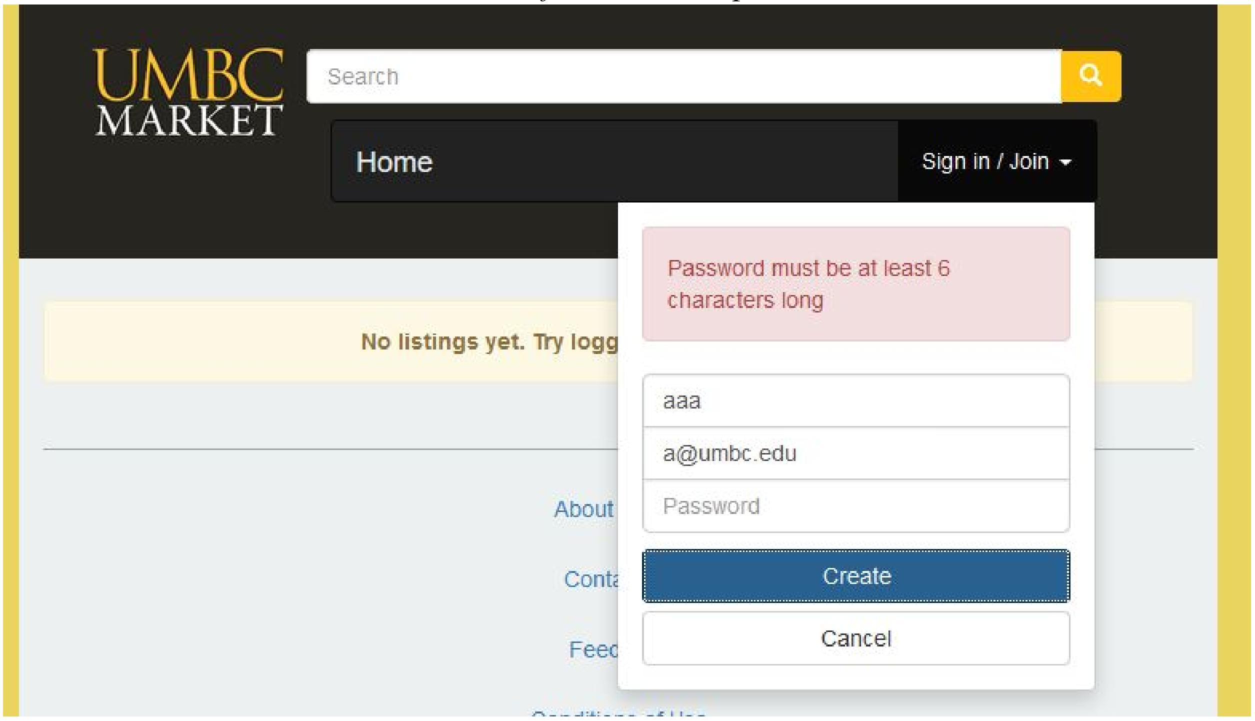
Invalid email

aaa

Email

Password

Error from invalid input



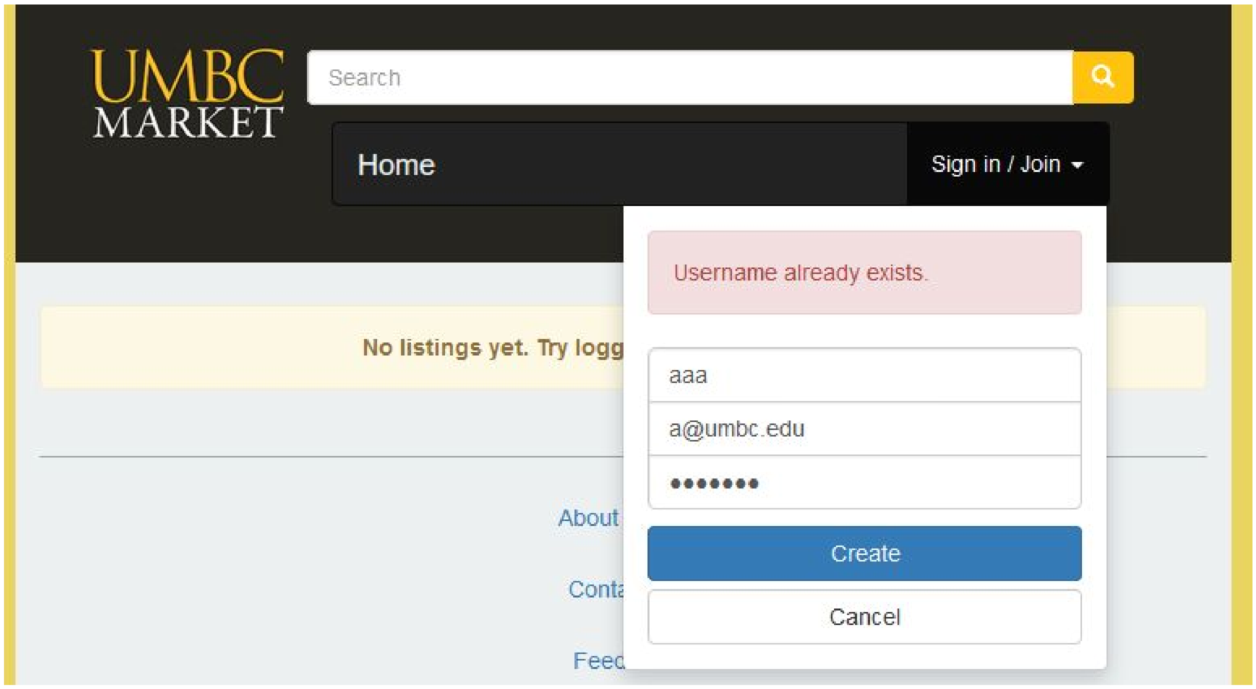
Password must be at least 6 characters long

aaa

a@umbc.edu

Password

Error from invalid input



Username already exists.

No listings yet. Try logg

aaa

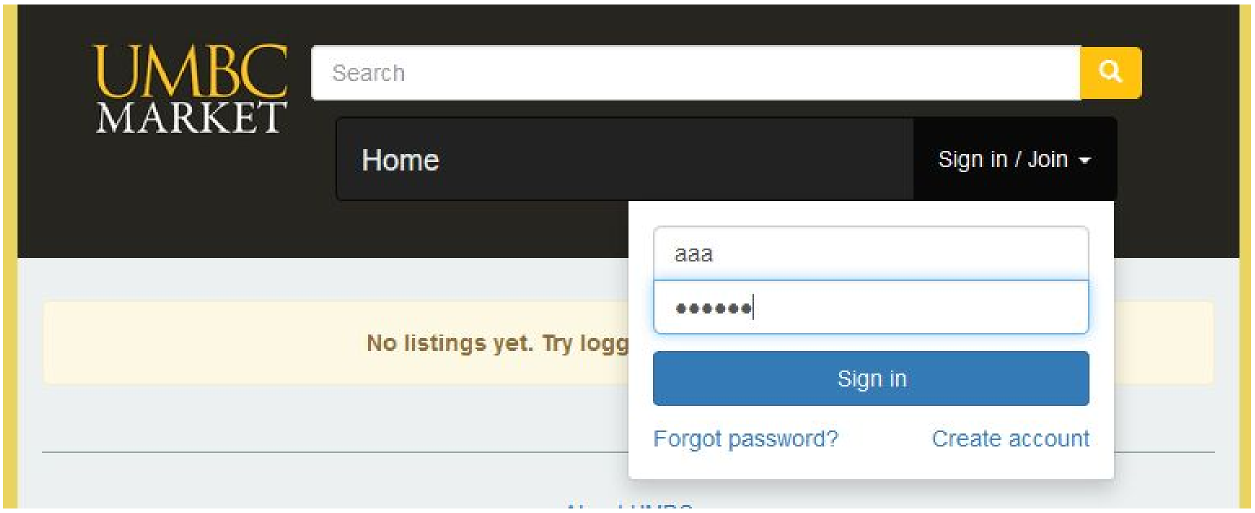
a@umbc.edu

•••••••

Error from entering existing username

3.2.2 Use Case: Logging into an Account
Conducted by: Zachary Robinson

Valid login information

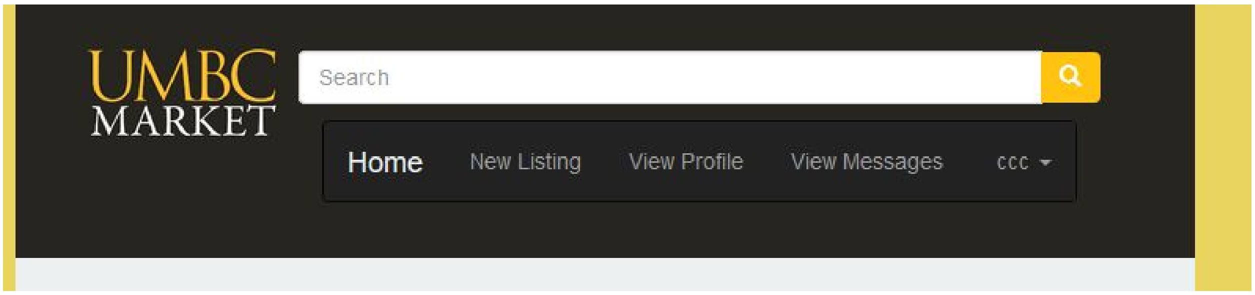


No listings yet. Try logg

aaa

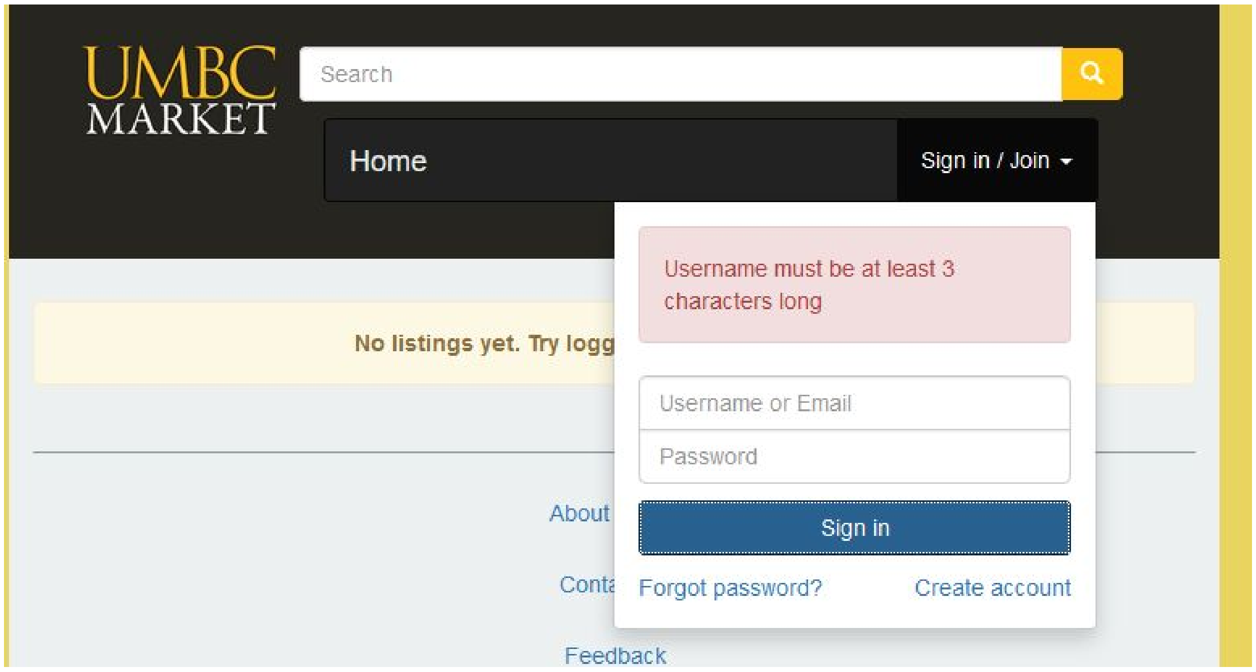
••••••

Logging in with valid input



Header change after logging in

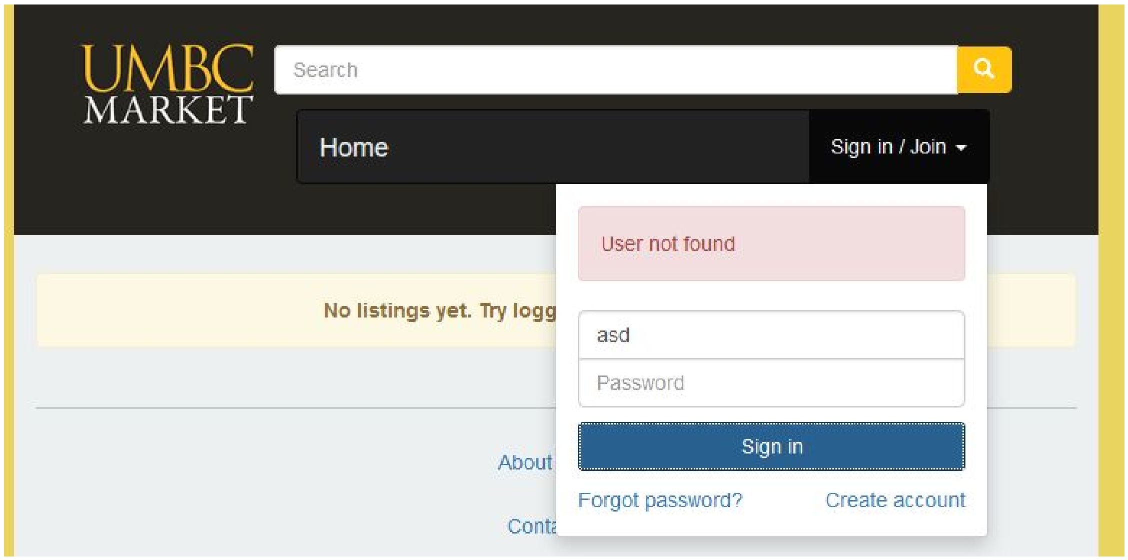
Invalid login information



Username must be at least 3 characters long

No listings yet. Try logg

Error from missing input



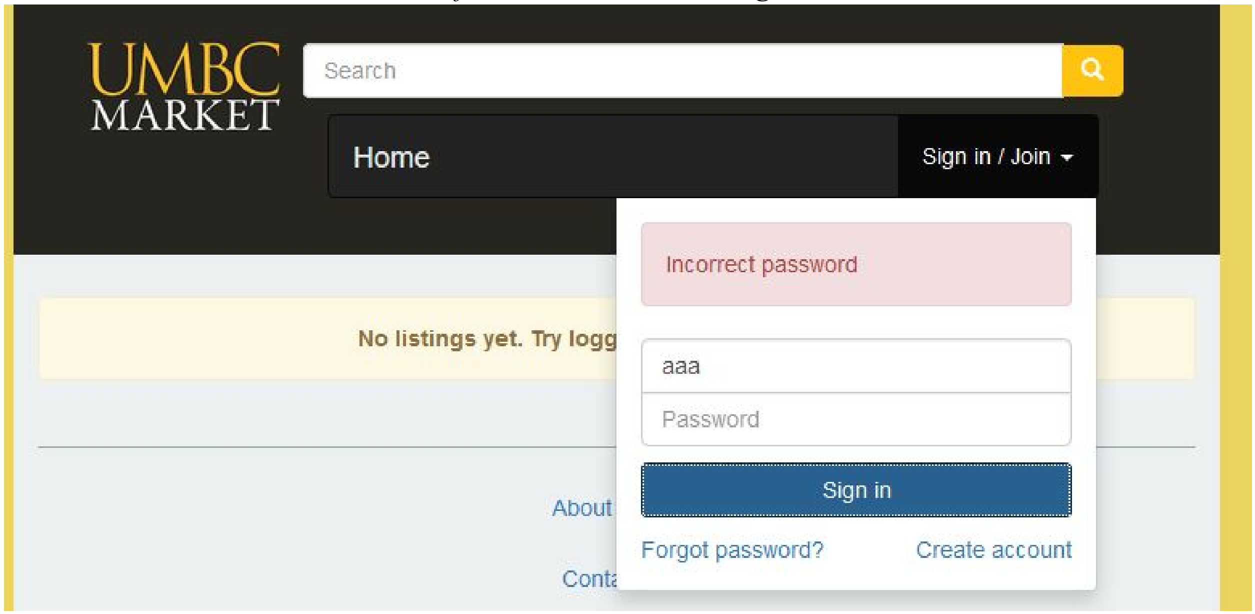
User not found

No listings yet. Try logg

asd

Password

User not found error when wrong username



Incorrect password

No listings yet. Try logg

aaa

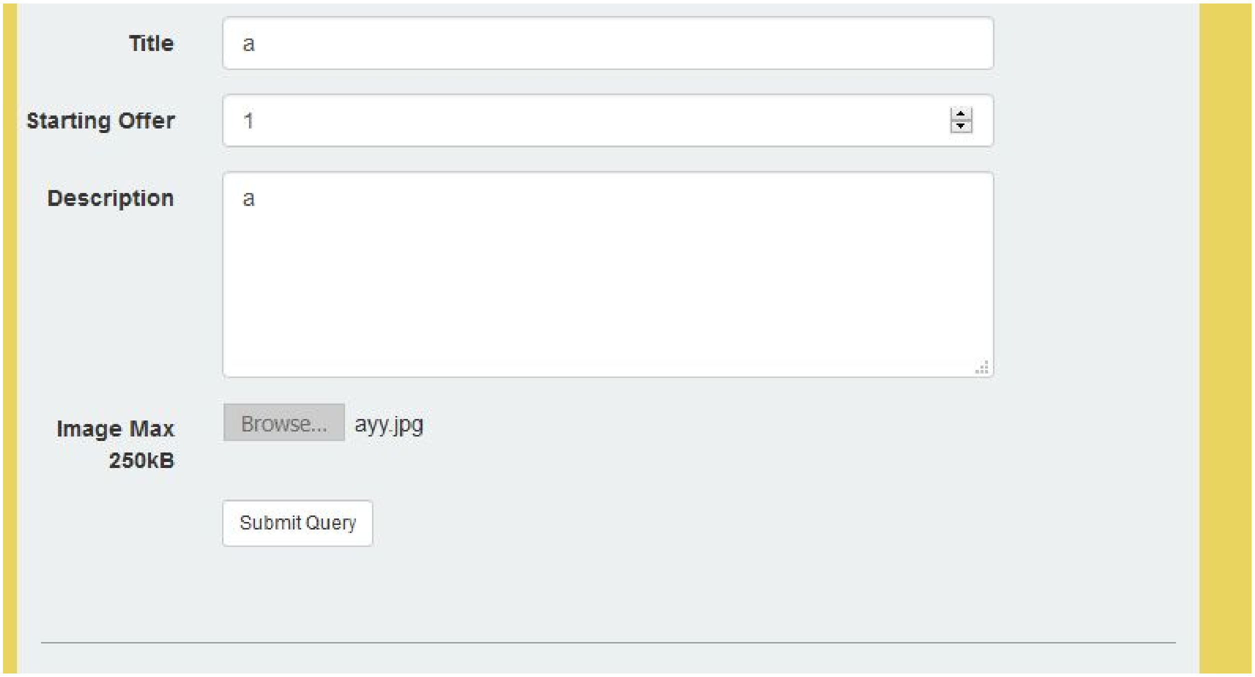
Password

Error from invalid input

3.2.3 Use Case: Listing a Product or Service

Conducted by: Seth Jenkins

Valid listing information

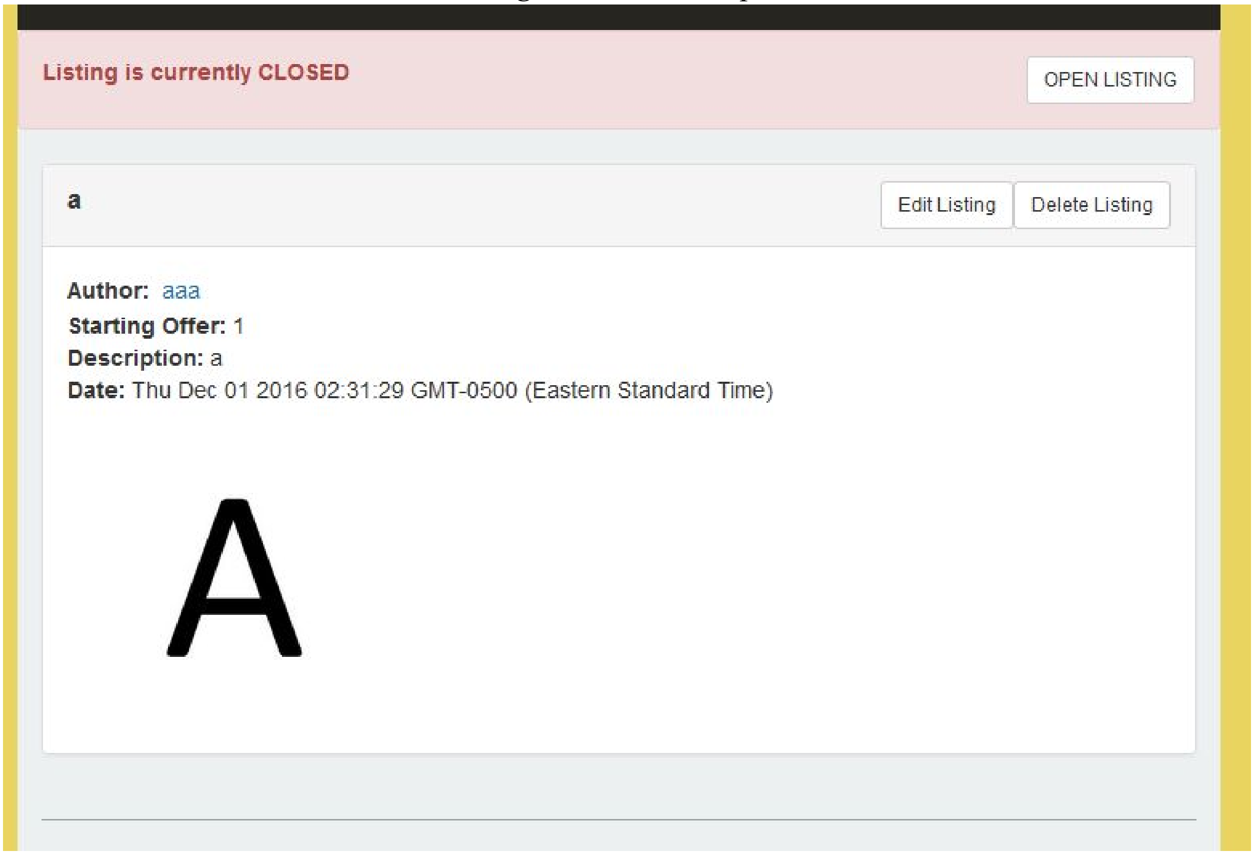

Title: a

Starting Offer: 1

Description: a

Image Max 250kB: ayy.jpg

Listing with all valid inputs

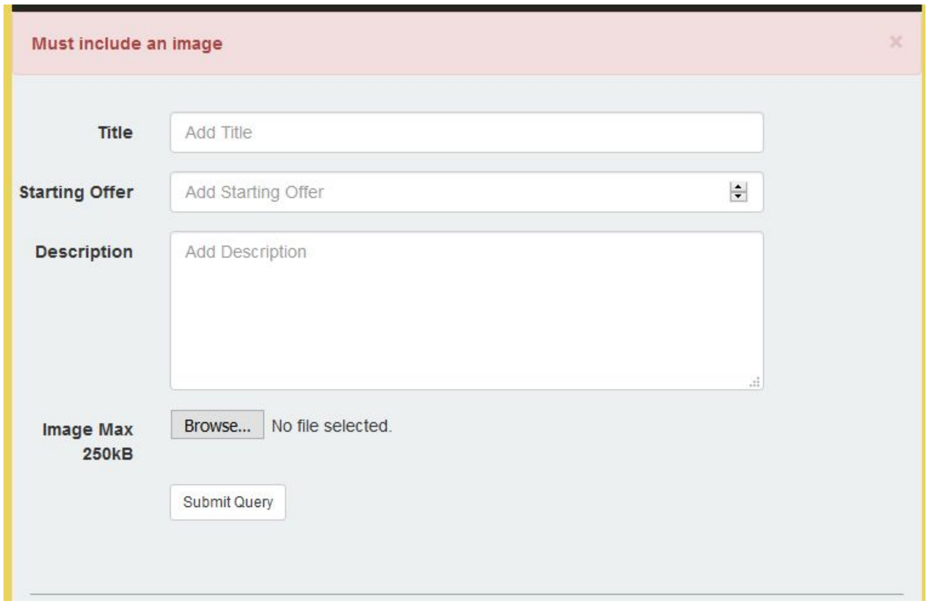

Listing is currently CLOSED

a

Author: aaa
Starting Offer: 1
Description: a
Date: Thu Dec 01 2016 02:31:29 GMT-0500 (Eastern Standard Time)

Listing is posted

Invalid listing information



Must include an image ×

Title: Add Title

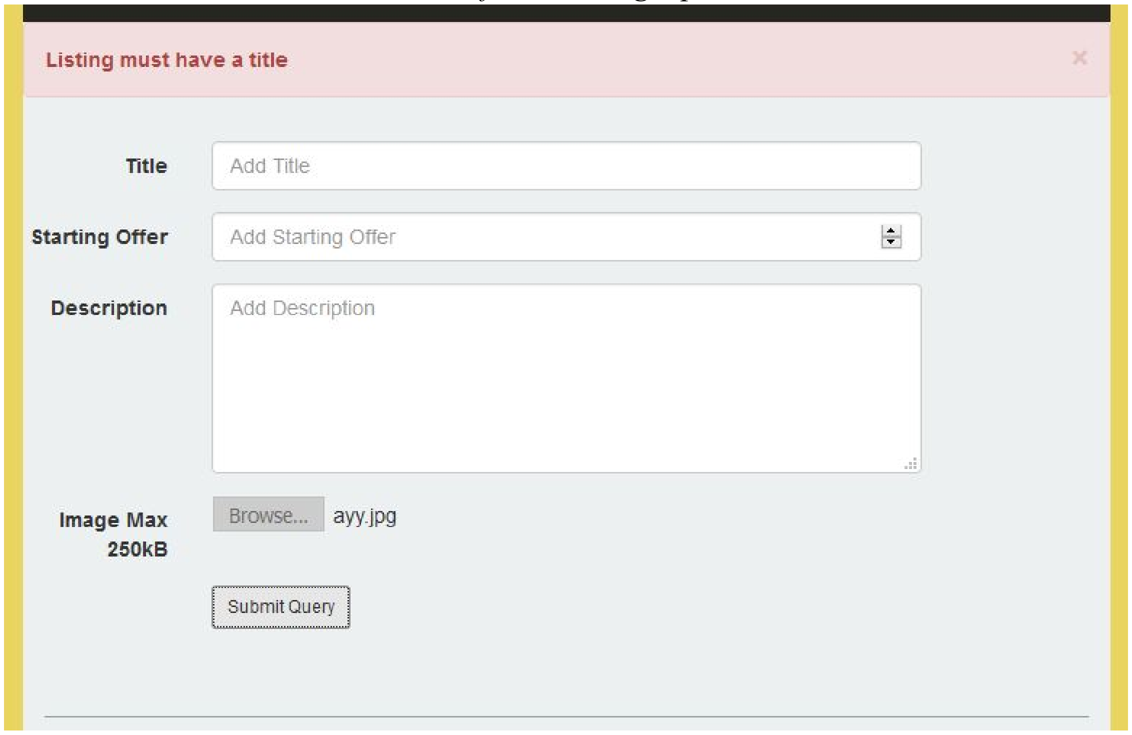
Starting Offer: Add Starting Offer

Description: Add Description

Image Max 250kB: Browse... No file selected.

Submit Query

Error from missing input



Listing must have a title ×

Title: Add Title

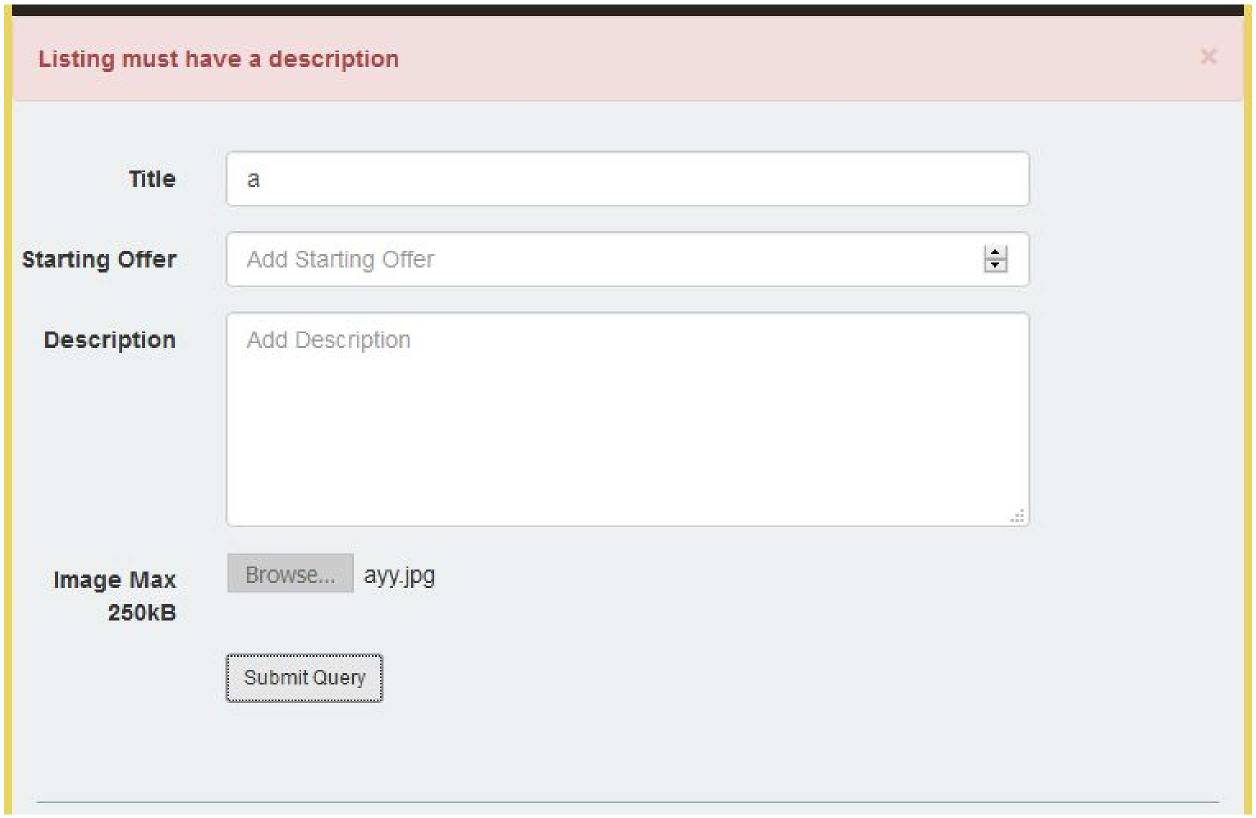
Starting Offer: Add Starting Offer

Description: Add Description

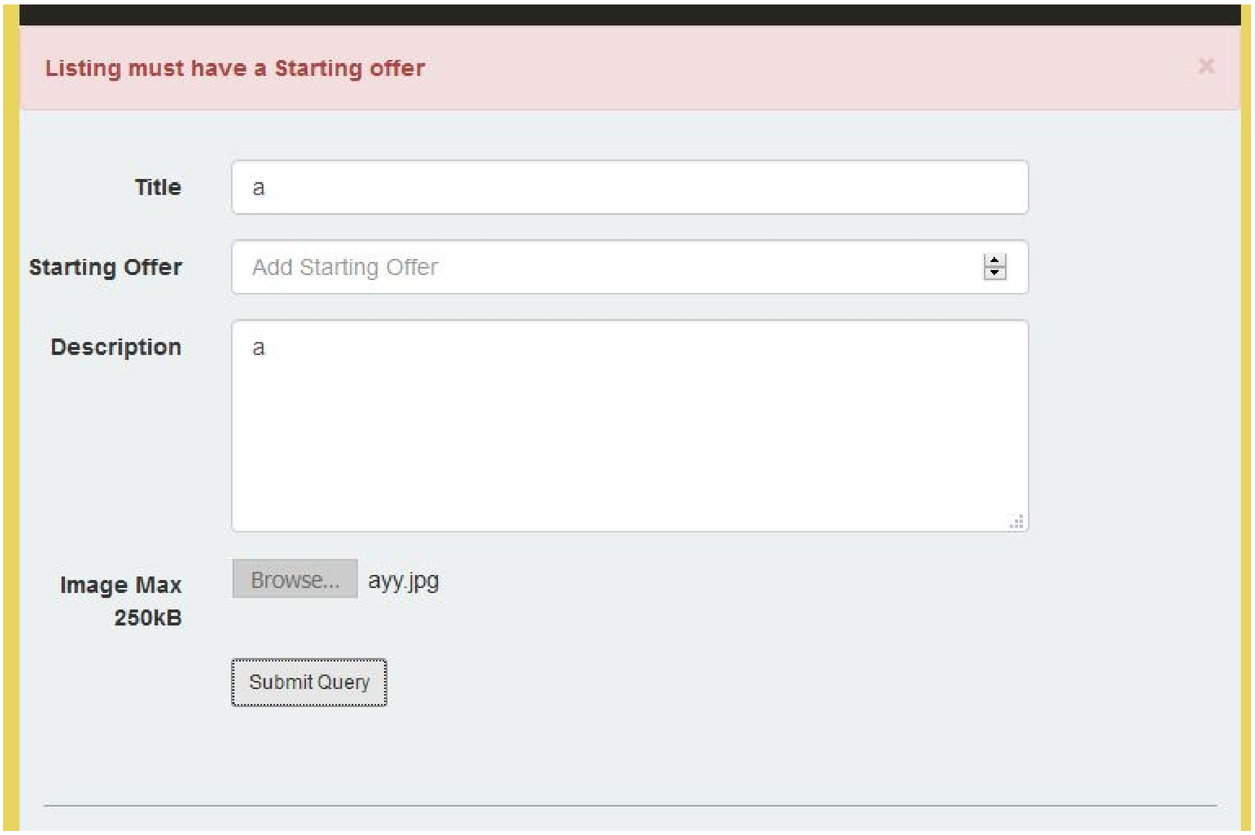
Image Max 250kB: Browse... ayy.jpg

Submit Query

Error from missing input


Listing must have a description

Error from missing input


Listing must have a Starting offer

×

Title: a

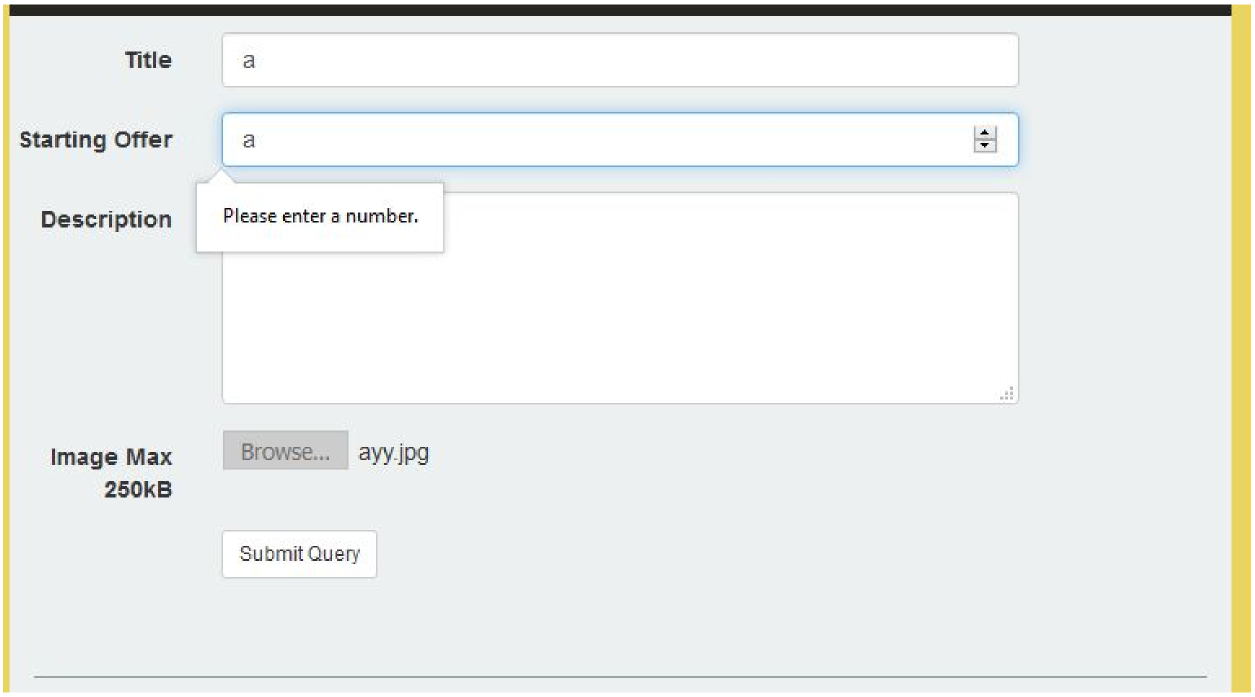
Starting Offer: Add Starting Offer

Description: a

Image Max 250kB: Browse... ayy.jpg

Submit Query

Error from missing input


Title: a

Starting Offer: a

Please enter a number.

Description:

Image Max 250kB: Browse... ayy.jpg

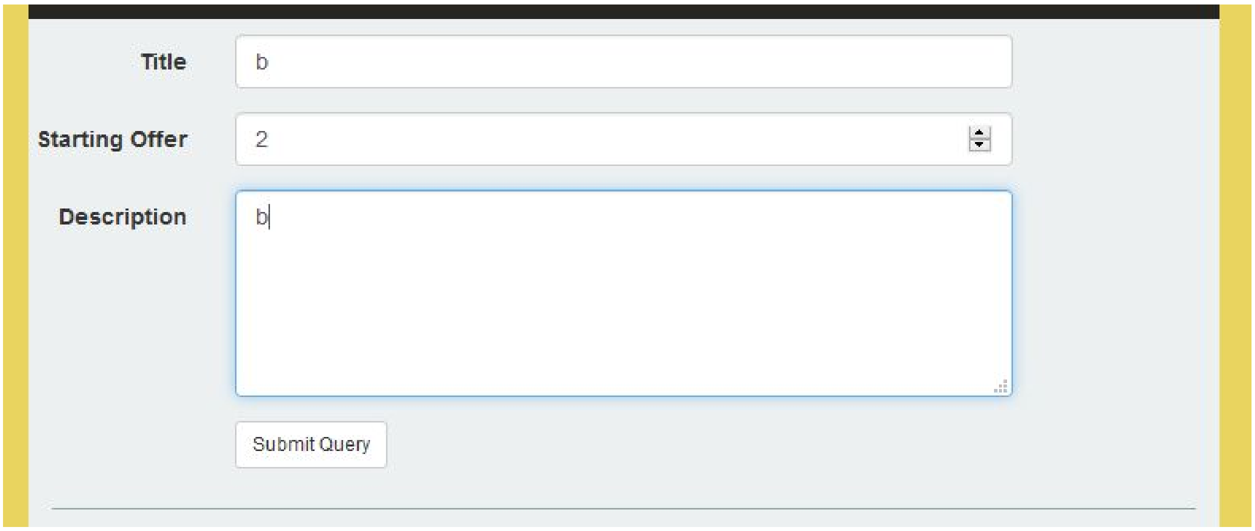
Submit Query

Error from invalid input

3.2.4 Use Case: Editing or Removing a Listing

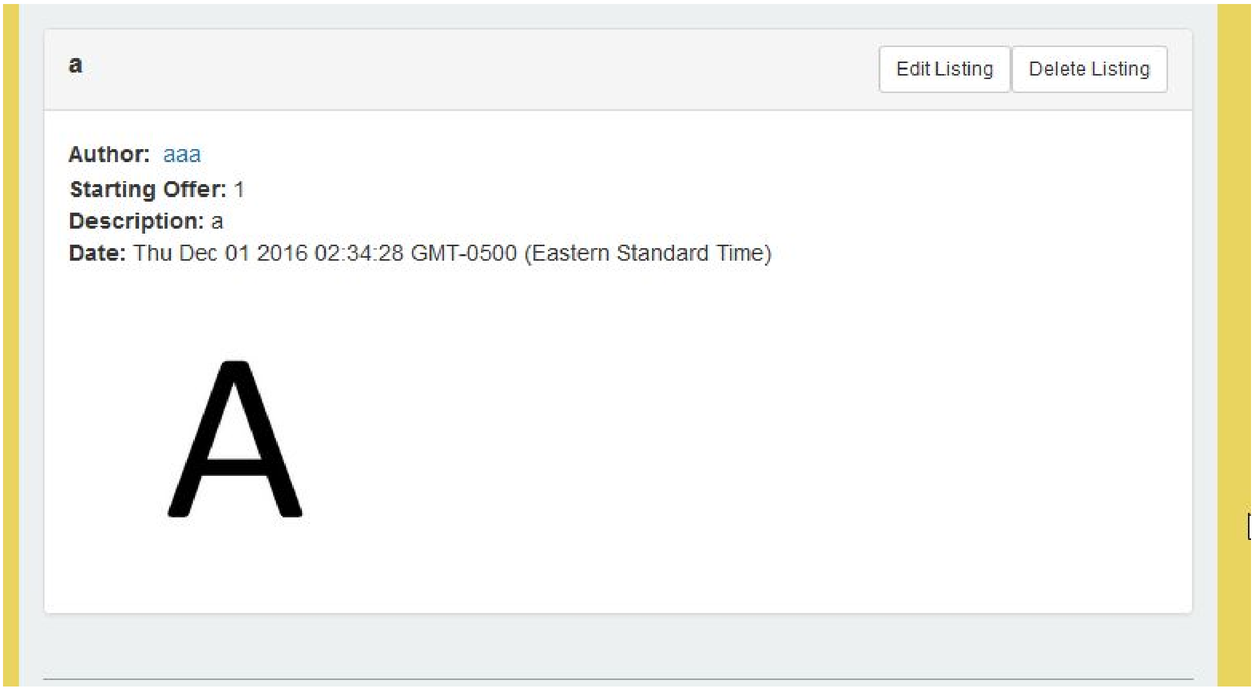
Conducted by: Wesley Chiou

Valid listing modification



Title	b
Starting Offer	2
Description	b

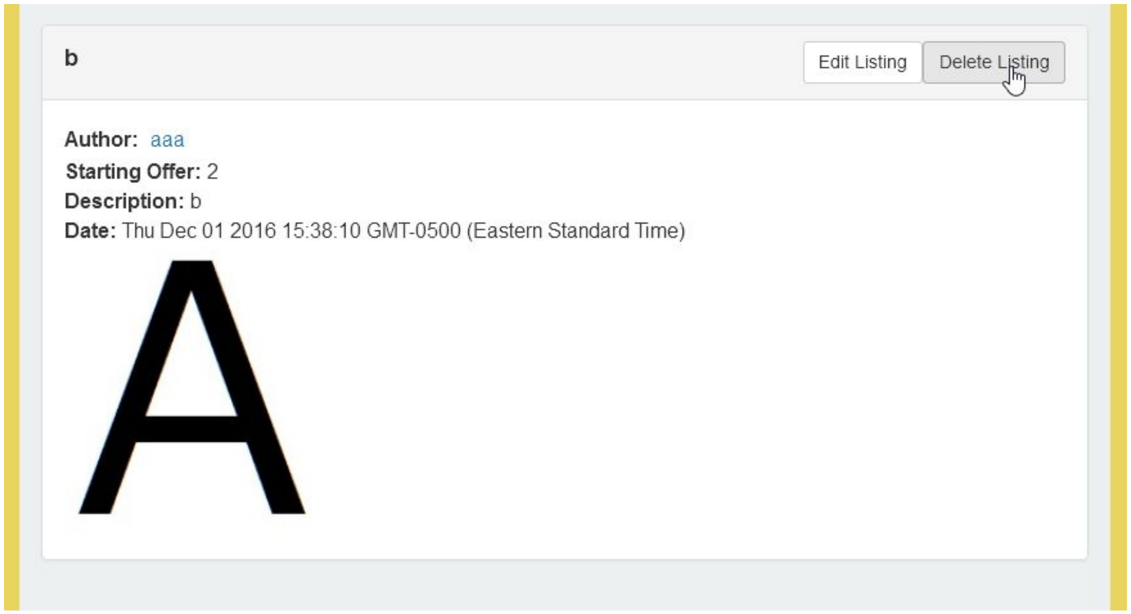
Listing posting with valid information



a

Author: aaa
Starting Offer: 1
Description: a
Date: Thu Dec 01 2016 02:34:28 GMT-0500 (Eastern Standard Time)

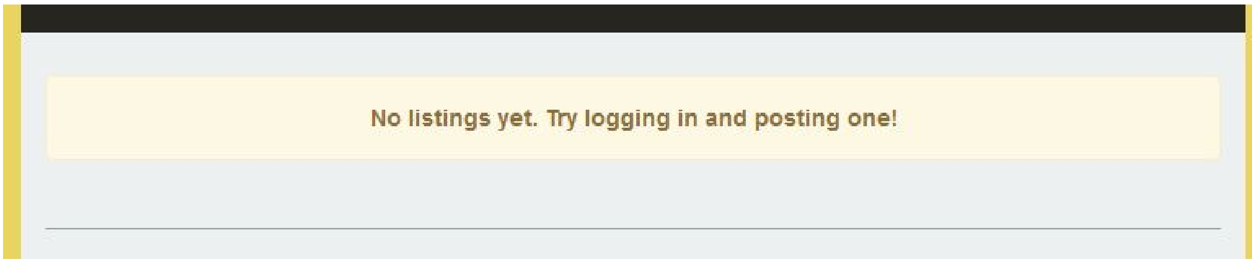
Listing is posted



b

Author: aaa
Starting Offer: 2
Description: b
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

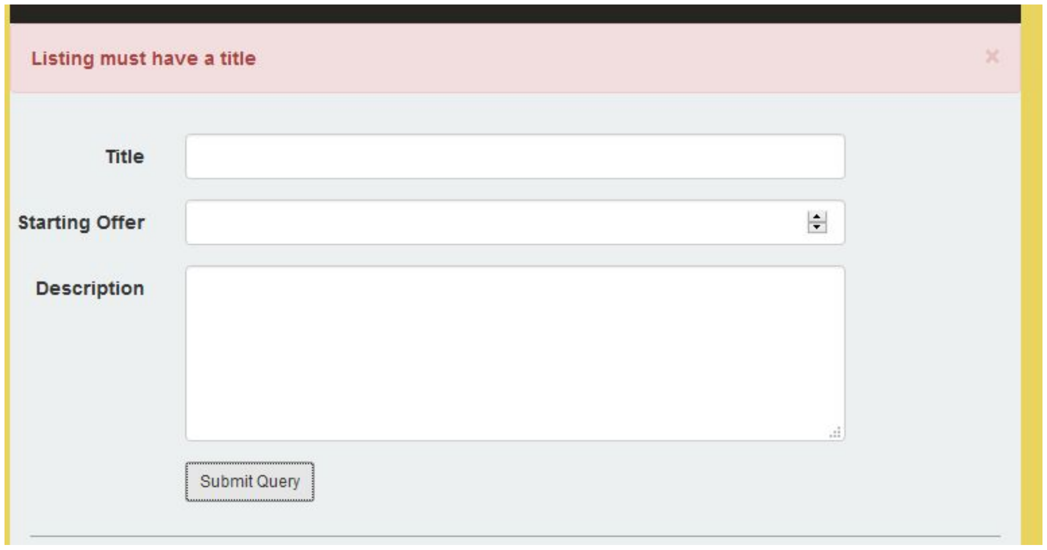
Click 'Delete Listing'



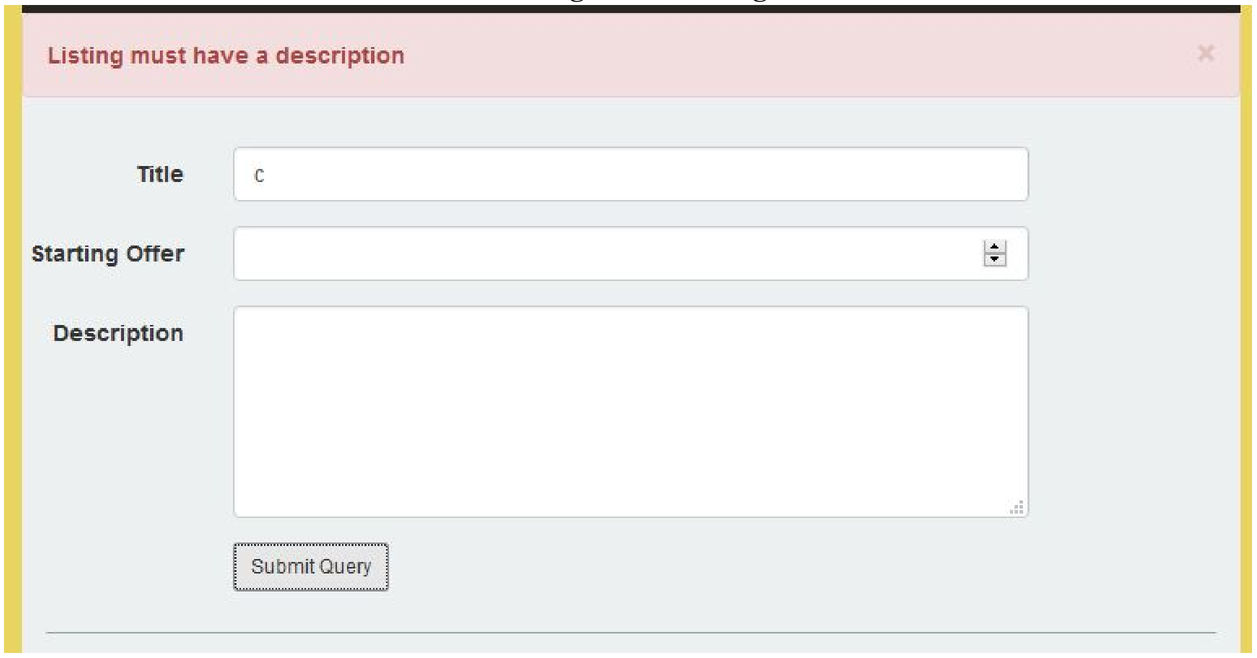
No listings yet. Try logging in and posting one!

Listing is deleted

Invalid listing modification


Listing must have a title

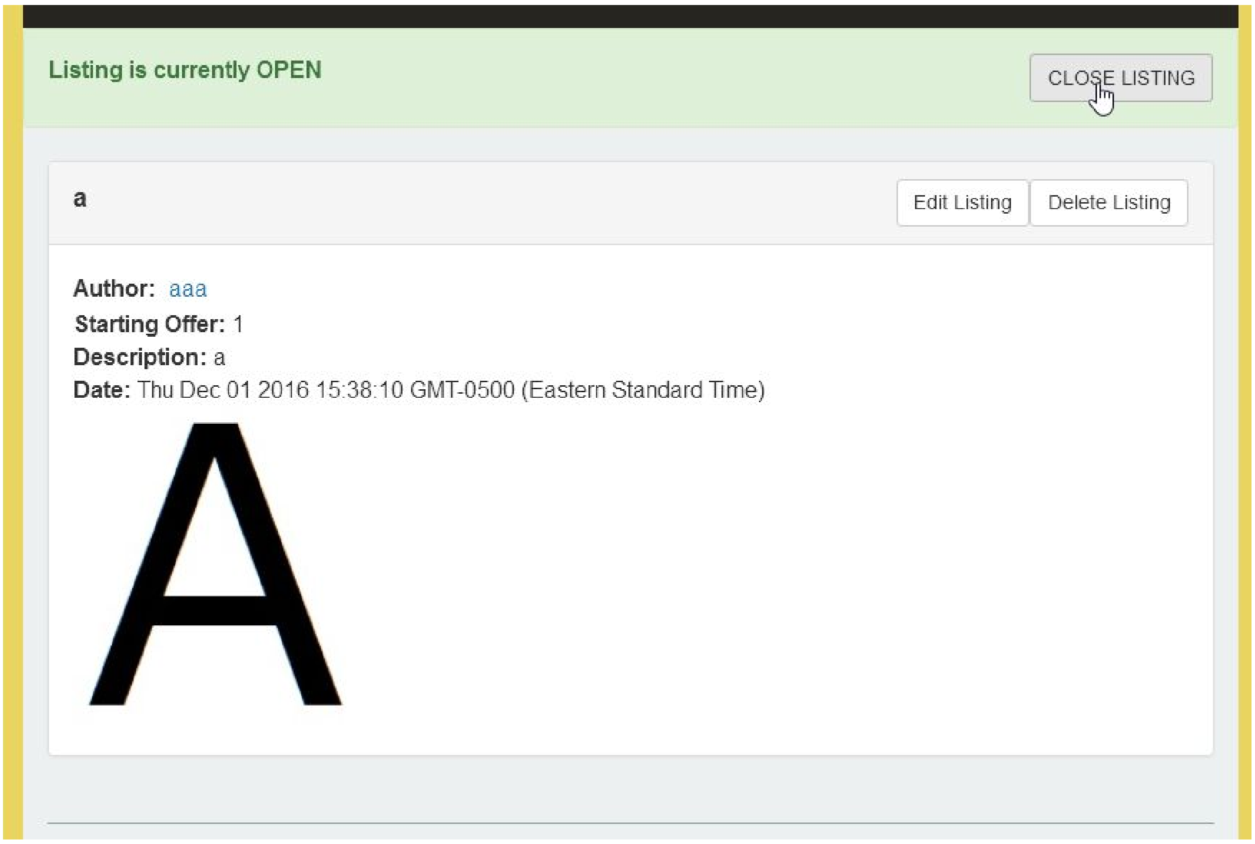
Error message with missing data


Listing must have a description

Error message with missing data

3.2.5 Use Case: Marking a Listing Complete
Conducted by: Wesley Chiou

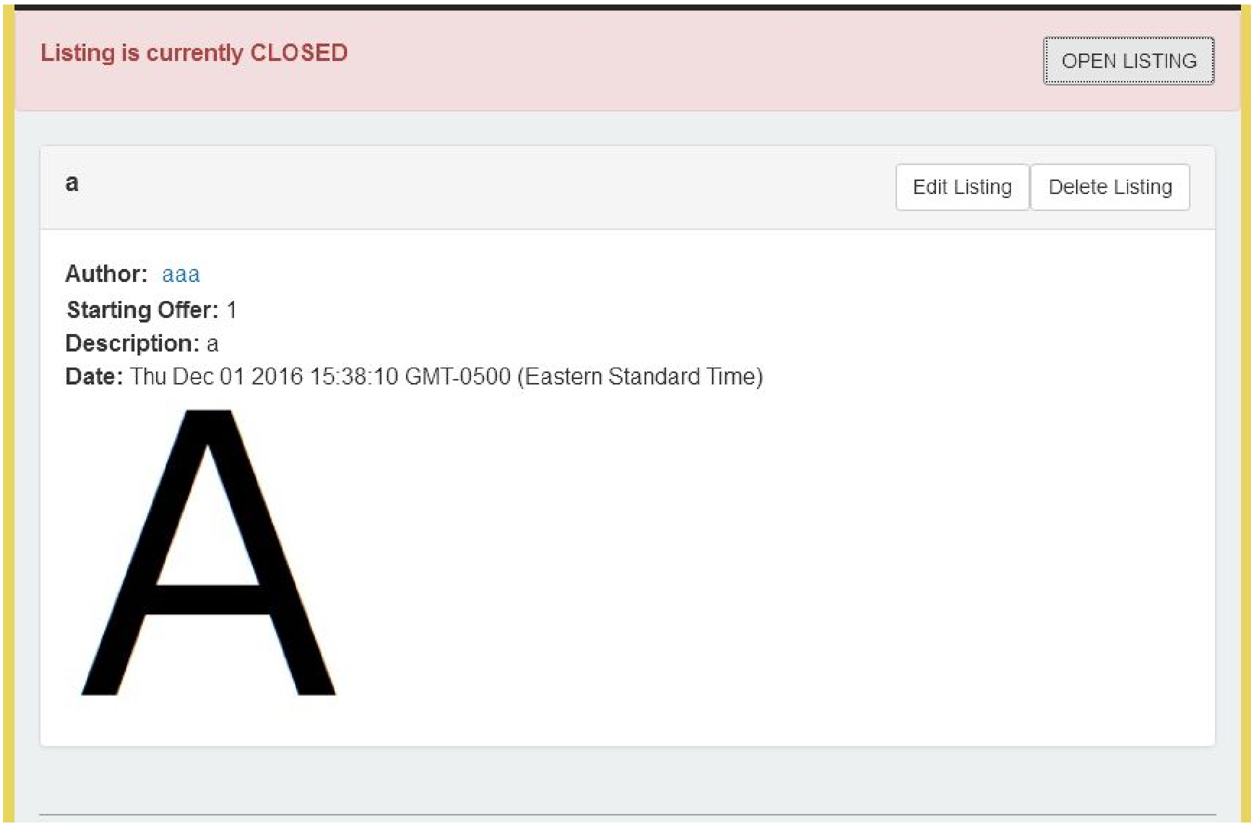
Completing a listing


Listing is currently OPEN

a

Author: aaa
Starting Offer: 1
Description: a
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

Closing a listing


Listing is currently CLOSED

a

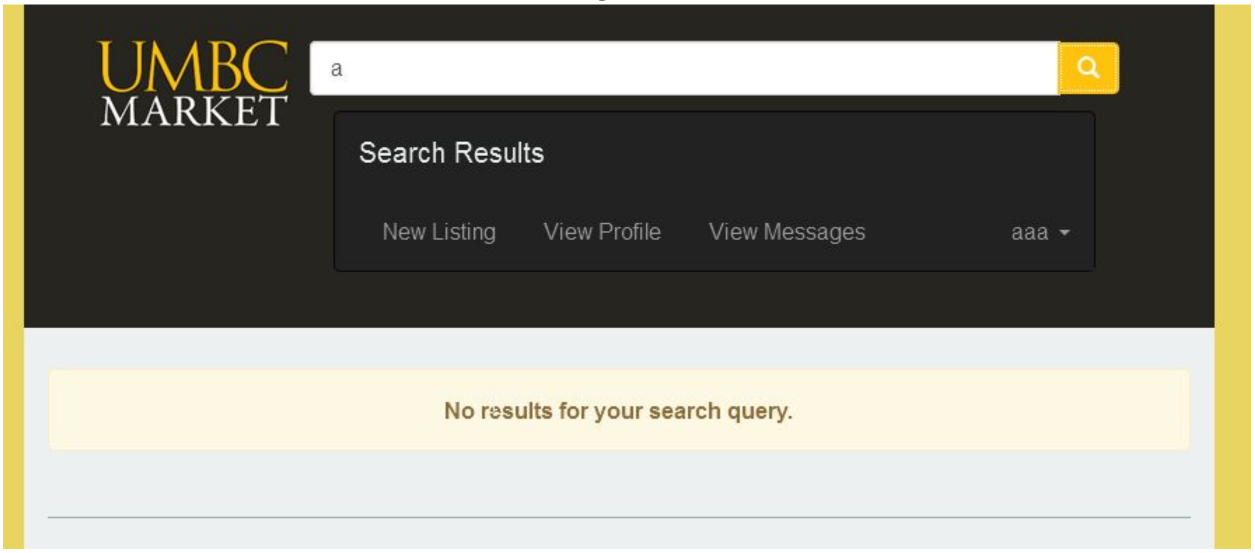
Author: aaa
Starting Offer: 1
Description: a
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

Listing is closed

3.2.6 Use Case: Searching the Market

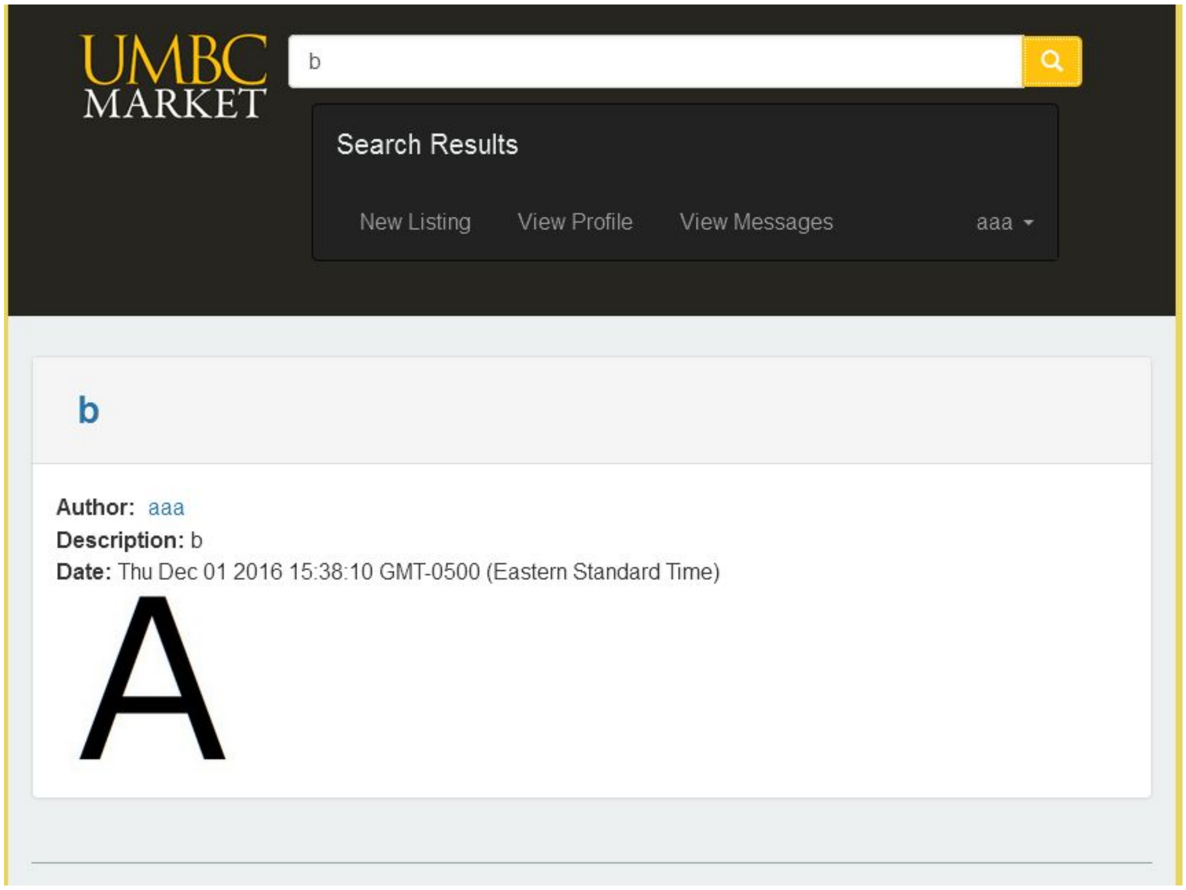
Conducted by: Sam Leung

Searching the market



No results for your search query.

Viewing search results with no listings



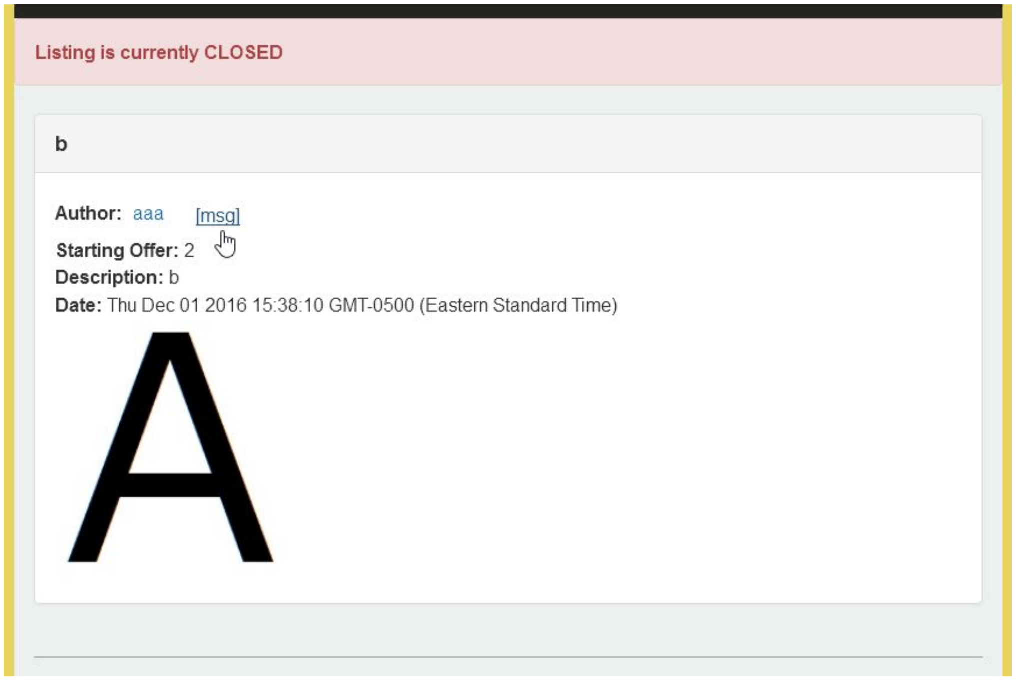
b

Author: aaa
Description: b
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

Viewing search results with listing

3.2.7 Use Case: Contacting a seller with an initial offer

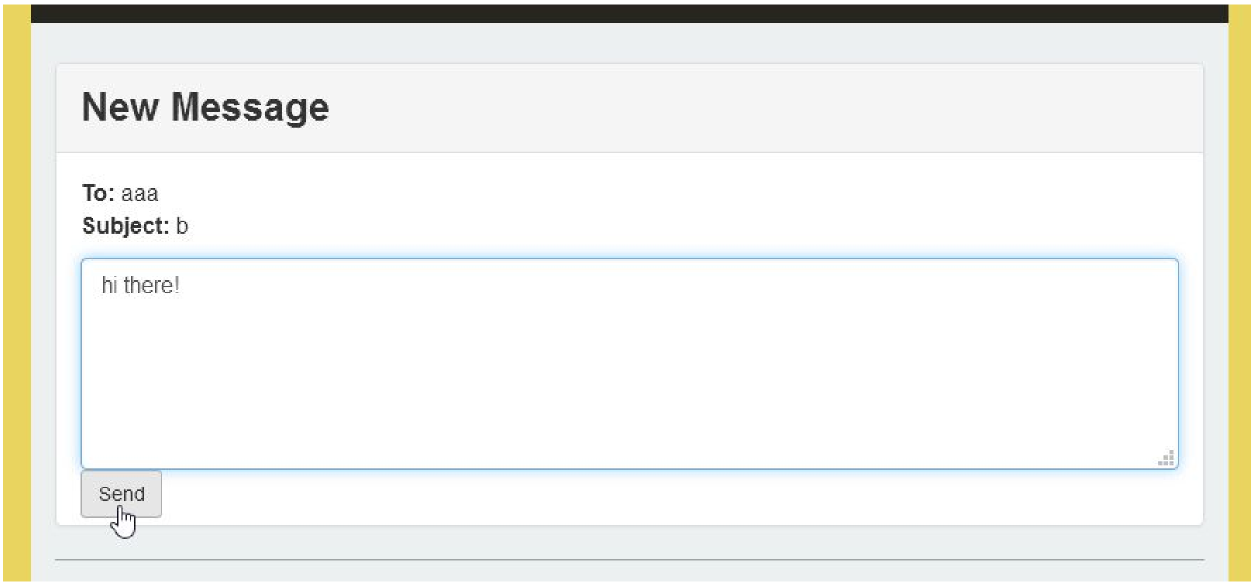
Conducted by: Sam Leung


Listing is currently CLOSED

b

Author: aaa [msg]
Starting Offer: 2
Description: b
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

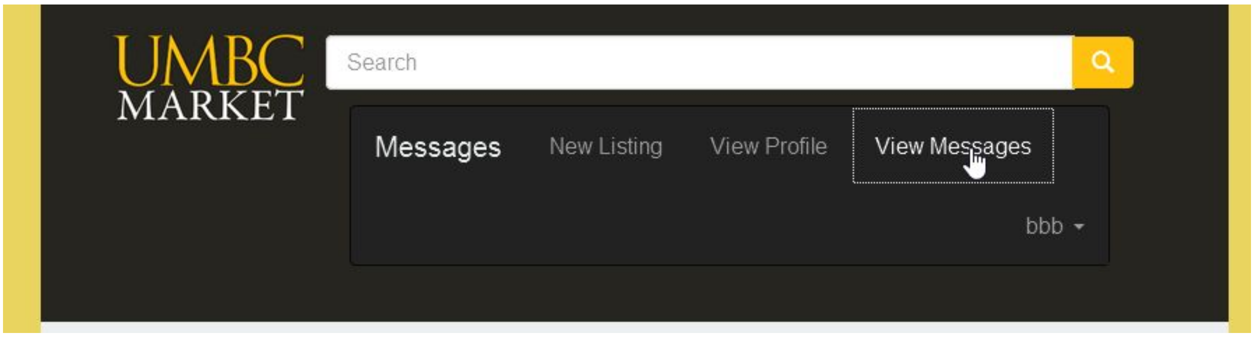
Messaging the seller


New Message

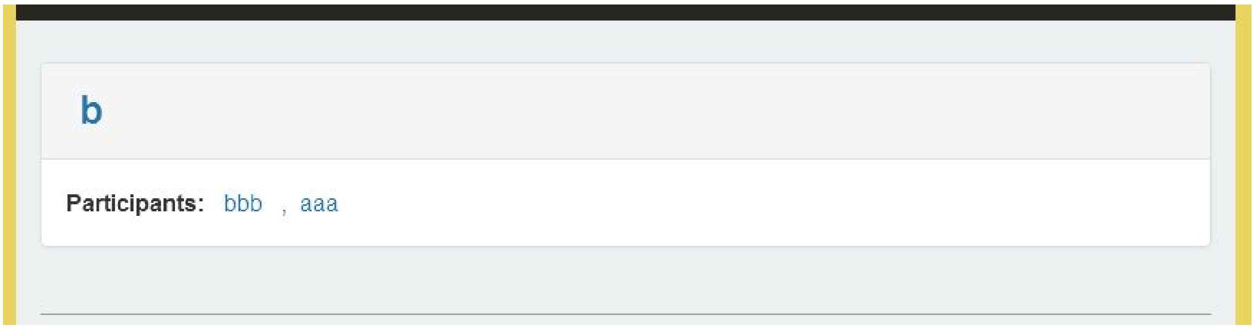
To: aaa
Subject: b

hi there!

Sending the message

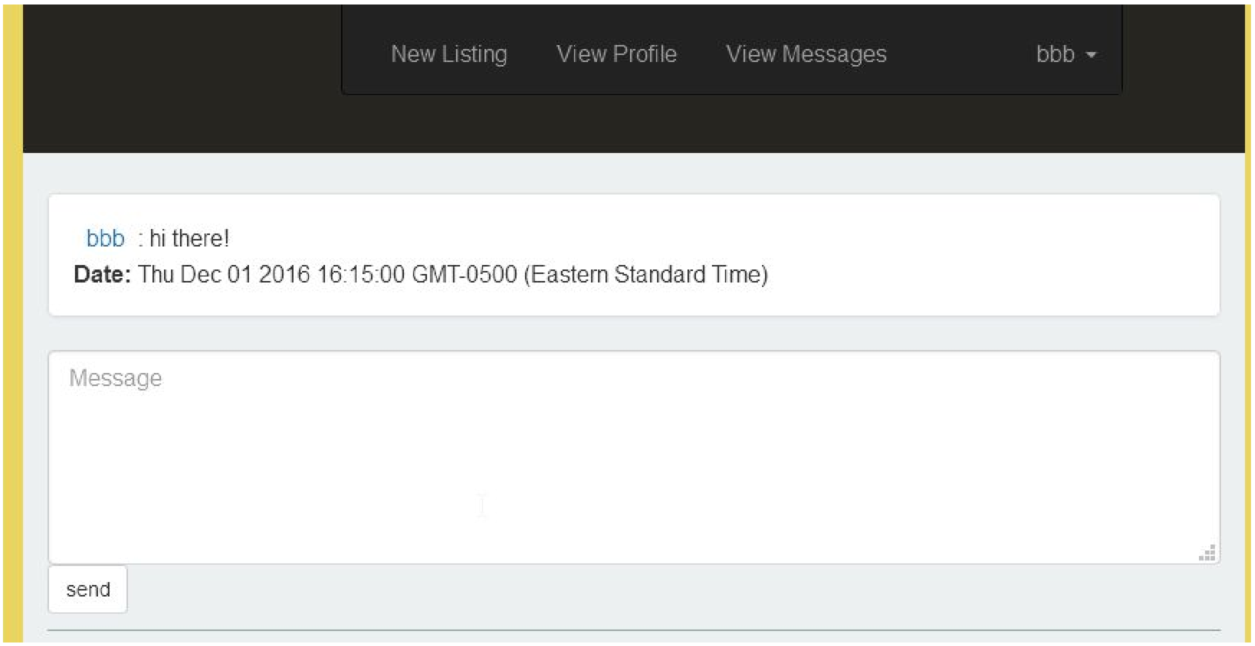


Going into mailbox



Participants: bbb , aaa

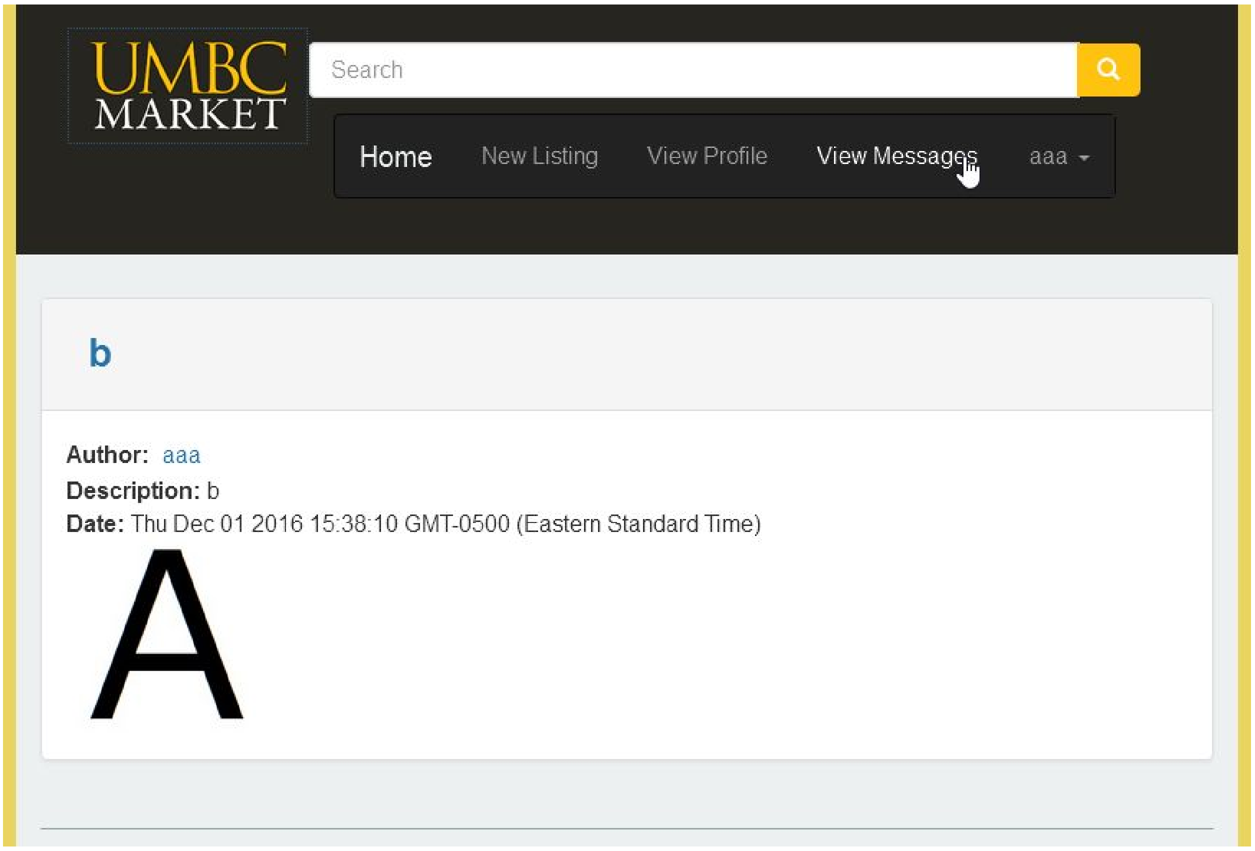
Viewing Messages



bbb : hi there!
Date: Thu Dec 01 2016 16:15:00 GMT-0500 (Eastern Standard Time)

Viewing whole conversation

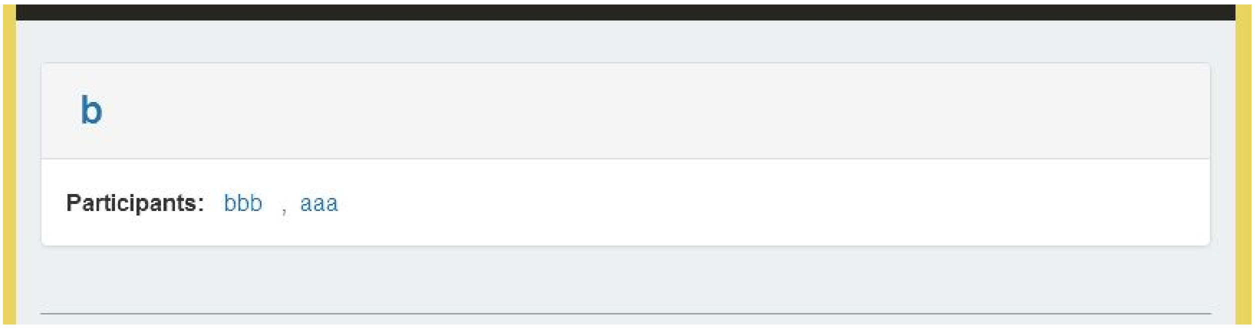
3.2.8 Use Case: Managing Messages
Conducted by: Sam Leung



b

Author: aaa
Description: b
Date: Thu Dec 01 2016 15:38:10 GMT-0500 (Eastern Standard Time)

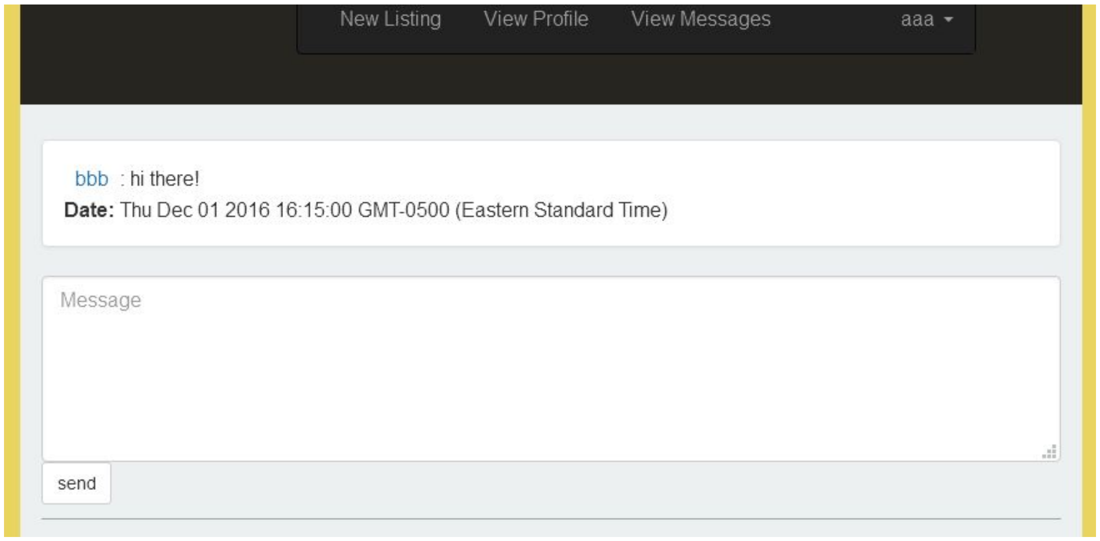
Going into mailbox



b

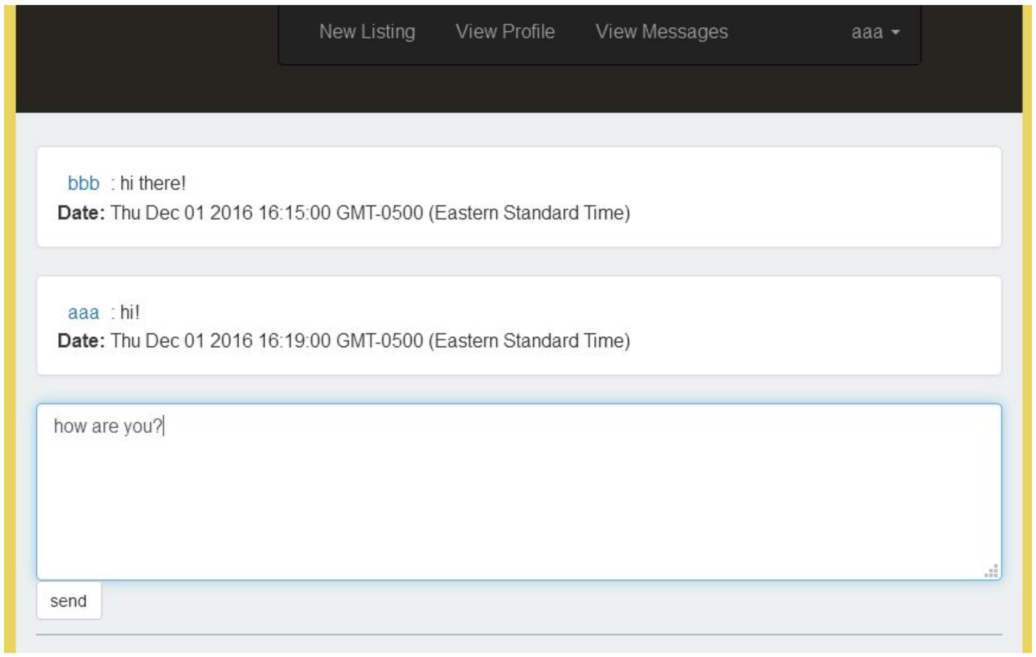
Participants: bbb , aaa

Viewing Messages



bbb : hi there!
Date: Thu Dec 01 2016 16:15:00 GMT-0500 (Eastern Standard Time)

Viewing conversation

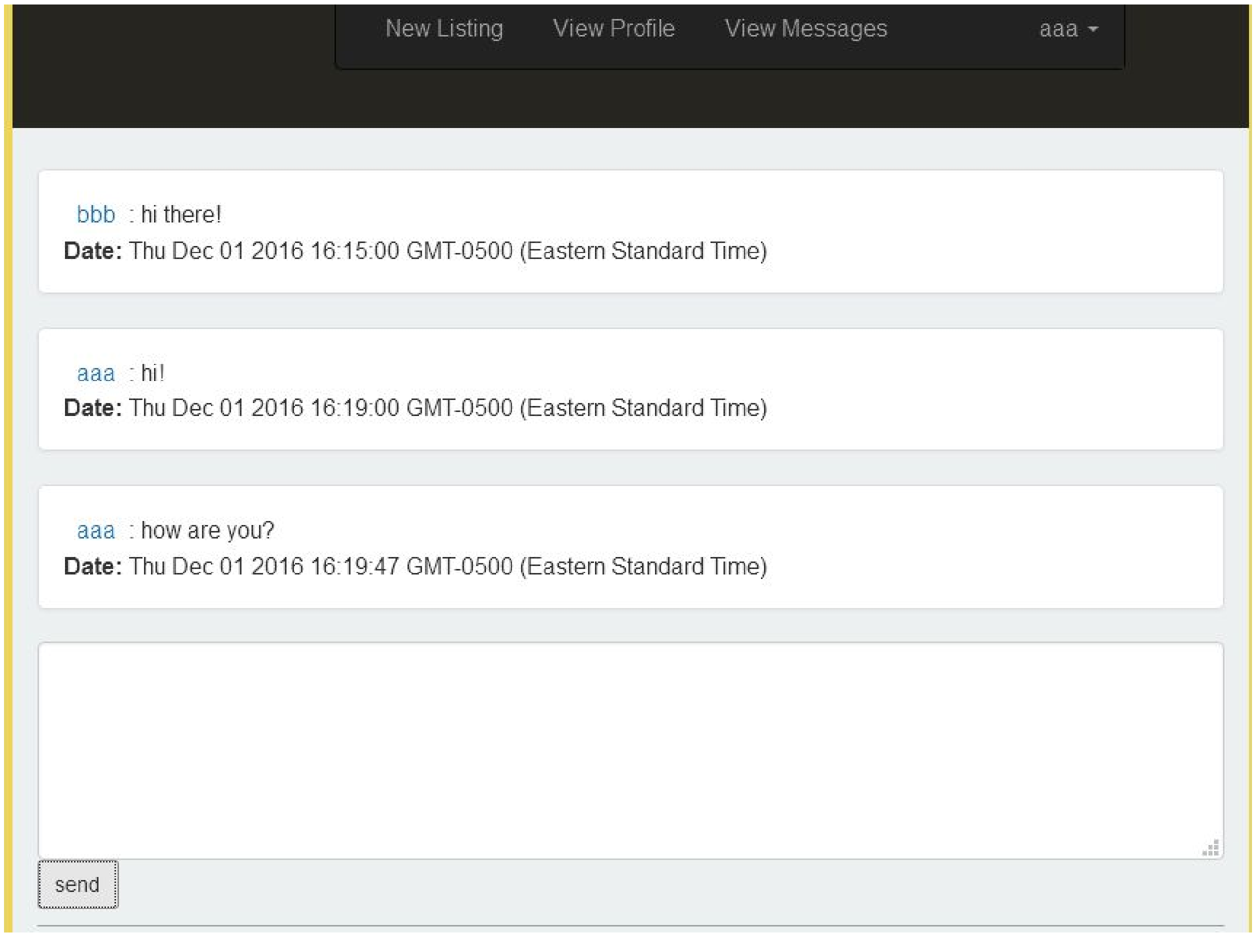


bbb : hi there!
Date: Thu Dec 01 2016 16:15:00 GMT-0500 (Eastern Standard Time)

aaa : hi!
Date: Thu Dec 01 2016 16:19:00 GMT-0500 (Eastern Standard Time)

how are you?

Responding



bbb : hi there!
Date: Thu Dec 01 2016 16:15:00 GMT-0500 (Eastern Standard Time)

aaa : hi!
Date: Thu Dec 01 2016 16:19:00 GMT-0500 (Eastern Standard Time)

aaa : how are you?
Date: Thu Dec 01 2016 16:19:47 GMT-0500 (Eastern Standard Time)

After responding

Appendix A - Team Review Sign-off

Each team member has reviewed this document and approves of its content and format. Any minor points of contention are addressed in the comments below.

Team

Name(print): Cory Ferrier Date: 11/30/2016

Signature: Cory Ferrier

Comments:

Name(print): Zachary Robinson Date: 11/30/2016

Signature: Zachary Robinson

Comments:

Name(print): Sam Leung Date: 11/30/2016

Signature: Sam Leung

Comments:

Name(print): ____ Date: ____________

Signature: ____

Comments:

____

____

____

Name(print): ____ Date: ____________

Signature: ____

Comments:

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Appendix B - Document Contributions

All group members contributed to the documentation through testing and adding in screenshots. Sam Leung Created the template for the document that was filled in later. Zachary Robinson contributed to this document by writing large portions of sections 1.1, 2.1, and 2.3. He additionally edited and revised the document before submission.