**Front End User Stories**

**USFE01 - Create wireframes for default templates**

**Description:** As a renter or rentee of tools, I want to be able to easily use and understand the web site so that I can find the tools I need for a given project, as a renter, and be able to easily manage my inventory and track tools I am renting out, as a rentee. The site design should be intuitive to the users of the site.

**Acceptance Criteria**
- Skins are reviewed by potential users to determine ease of use – signed off
- Skins are reviewed by technical team members to determine if they are able to be developed – signed off

**Tasks**
- Create the Home Page Wireframe . 1 hr – Pavel
- Create the Detail Page Wireframe . 1 hr – Chris
- Create the List Page Wireframe . 1 hr – Chris
- Create the Browse by Location Page Wireframe . 1 hr – Pavel
- Create the Checkout Page Wireframes. 2 hrs - Chris
- Create the Renter Inventory Page Wireframe. 1 hr - Chris

**Notes** (Additional documentation to provide clarity to the user story)
- Drawn renderings and modeling
- Wireframes
- Wireframe Mockups
USFE02 - Create global CSS file

**Description:** As a designer of the site, I want to have the majority of the site’s design code to reside in a CSS file so that the overall look and feel does not have to be replicated for each page, and any updates are easy to implement.

**Acceptance Criteria**
- CSS must be compatible with the most popular browsers
- All web pages must call to a CSS file

**Tasks**
- Agree on color schema and overall design principals. 1 hr - Group
- Create image layout based on wireframes. 3 hrs Pavel
- Create CSS file when coding the site. 3 hrs Pavel

**Notes**
- Wireframes
- Graphic Layout
USFE03 - Use HTML5, PHP and ASP.NET to code pages

Description: As a user of the site, I need to be able to access and interact with the site using the latest web browsers so that I can easily rent a tool or post a tool for rent or sale.

Acceptance Criteria
- The website code is compatible with the latest versions of IE, Firefox, and Chrome
- Users are able to interact with the site with system errors

Tasks
- Write HTML code using Adobe Dreamweaver. 3 hrs - Pavel
- Include (code) required JavaScript, jQuery and AJAX plugins. 3 hrs - Pavel

Notes
- Wireframes
- Graphic Layout

USFE04 - Validate fields for all forms using ASP.NET

Description: As a designer of the site, I want to validate and form entries to make sure that only valid data is being sent in.

Acceptance Criteria
- All data fields from forms are being validated once the user enters data
- User is presented with an error if entry doesn’t pass validation

Tasks
- Program forms using ASP.NET - 5 hrs - Rania and Hermain
- Create error messages and display options in ASP and HTML. 3 hrs - Rania and Hermain

USFE05 - Create the information architecture diagram

Description: As a designer of the site, I want to visualize the architecture diagram to help spot any inconsistencies.

Acceptance Criteria
This tool is needed to be able to understand the interaction the user has with the site

Tasks
- Create IA diagram for rentee. 1 hr - Alex
- Create IA diagram for renter. 1 hr - Alex

USFE06 - Retrieve dynamic content (list & home page)
Description: As an administrator of the site, I want to have the majority of the site's content reside in a central location and display based on a user's action, in order to reduce the amount of content that is maintained within the web pages themselves, and also allow for easy content updates.

Acceptance Criteria
- Content must be called from a centralized repository
- Content is displayed based on the site's user actions
- Content must display in accordance with the site's design

Tasks
- Agree on color schema and overall design principals - 1 hr - Group
- Create image layout based on wireframes - 2 hrs - Pavel

Notes
- Wireframes
- Graphic Layout
- Database

USFE08 - Implement map applet for "rentee finder"
Description: As a renter of tools of the site, I want to be able to identify rentees in my geographic locations so that I can find out who I can rent tools from, since I will have to drive to pick up the tools myself.

Acceptance Criteria
- Create a map API for the rentees to see renters around them

Tasks
- Code map applet. 30 min - Group
- Add map applet to site. 30 min - Group
- Configure search function in map applet. 30 min - Group
USFE09 - Organize site navigation to allow for renter browsing

Description: As a renter of tools, I want to be able to easily navigate the web site so that I can find the tools I need for a given project.

Acceptance Criteria
- Skins are reviewed by potential users to determine ease of use – signed off
- The top navigation is organized by how a tool is used, and should make sense to tool renters that are not experts
- Build out hierarchy from top navigation to lower level pages.

Tasks
- Collect potential item inventory and create intuitive tool navigation – 1 hour – Chris
- Put together mapping document that lays out site hierarchy – 2 hours - Chris

Notes
- Wireframes
- Mapping document

USFE10 - Create search engine allowing user to search for tools

Description: As a user of the site, I want the ability to search for tools via an engine in order to easily find the product I am looking for which will lead to improved transactions

Acceptance Criteria
- Search box is visible and usable through the site
- Search brings back expect results upon request

Tasks
- Build search text entry into the web skins. 1 hr - Group
- Index data for search 1 hr - Group
- Build list, detail, and no results search response pages . 2 hrs - Rania and Hermain

Notes
- Wireframes
- Graphic Layout
- Indexed data model

USFE11 - Organize menu options

Description: As a renter or rentee of tools, I want to be able to easily understand the top and sub menu options so I can quickly navigate to where I need to go on the web site.
Acceptance Criteria

- The top navigation is reviewed by and signed off on by stakeholders - they confirm its usability

Tasks

- Create the top and sub nav layout based on the web skins. 2 hr - Chris
- Put together mapping document that lays where the users would be taken when clicking on a top or sub nav option. 1 hr - Chris

Notes

- Wireframes
- Mapping document

USFE12 - Create user forum

Description: As a user of the site, I want to be able to interact with other users so that I can easily identify a potential partner for tool rentals

Acceptance Criteria

- By creating a forum, we can create a sense of community among all the users of the site
- This will allow both rentees and renters to spend more time on the site, increasing our ROI.

Tasks

- Create page for users to see all the topics in the forum. 1 hr - Rania and Hermain
- Create page for users to see individual forum discussion. 1 hr - Rania and Hermain

Notes

- Wireframes
- Graphic layout

USFE13 - Create user feedback rating system

Description: As a user of the site, I want to be able to view ratings of other users so that I can easily identify a potential renter/rentee partner that I feel comfortable working with.

Acceptance Criteria

- Important because this is how the rentees are going to be able to decide which renter to rent from.
- Additionally this is important for the renter as well, because this is allows him to see how the rentee has been rated before.

Tasks

- Create rating system for renter. 1 hr - Group
- Create rating system for rentee. 1 hr- Group

USFE14 - Error handling

Description: As a user of the site, I want to be able to easily identify why an error is occurring so that I can more easily fix the problem via my own action or through site support.

Acceptance Criteria

- Create an error screen that will indicate the user they have reached an error
- By using this error screen, we can give the user instructions on what to do next
Tasks
● Create error screen for users. 30 min - Rania and Hermain
● Create instructions for the users once they reach the error screen. 1 hr Group

Notes
● Graphic layout

USFE15- Create notification system
Description: As a designer of the site, I want to be able to implement a system of email notifications for all users, that way our system is very effective in reaching our users.

Acceptance Criteria
● Renters have control over request to rent tools

Tasks
● Create screen for the renter to see the rentee request. 45 min - Rania and Hermain
● Approve or deny rentee request. 30 min - Rania and Hermain
● Finalize transaction. 1 hr - Rania and Hermain
● Send email to rentee. 1hr - Rania and Hermain

Notes
● Graphic layout
● Database table

USFE16 - Allow users to approve/deny a rentee’s request
Description: As a seller/renter of tools on the site, I want to be able to approve or deny a rental/sale request via the site which allow for an improved user experience and allow me to more easily manage my inventory.

Acceptance Criteria
● Renters have control over request to rent tools

Tasks
● Create screen for the renter to see the rentee request. 1 hr - Rania and Hermain
● Approve or deny rentee request. 1 hr - Rania and Hermain
● Finalize transaction. 45 min. - Rania and Hermain
● Send email to rentee. 45 min - Rania and Hermain

Notes
● Graphic layout
● Database table

USFE17 - Create functionality for users to update their own inventory (CRUD)
Description: As a seller/renter of tools on the site, I want to manage my product inventory, so that I can more easily make products available for rent/sale and also maintain any current transactions
Acceptance Criteria

- Allow renters to maintain track of their tools
- Keeps track of transactions made

Tasks

- Screen for renters to see the list of tools available. 1 hr - Rania and Hermain
- Screen to make tools available. 1 hr - Rania and Hermain
- Screen to display list of transactions made. 1 hr - Rania and Hermain

Notes

- Graphic layout
- Database table

USFE18 - Allows users to sell their tools

Description: As a seller/renter of tools on the site, I want to be able to easily manage my inventory and track my transactions via the site so that I can make money through the site.

Acceptance Criteria

- Renters are able to not only rent their tools but sell as well

Tasks

- Create screen for the user to select the tools they would like to sell. 1 hr - Rania and Hermain
- Link database to update the tools being sold. 1 hr - Rania and Hermain
- Link payment engine to complete transaction. 1 hr - Rania and Hermain
- Screen to confirm transaction. 1 hr - Rania and Hermain
- Send email to renter and rentee with a receipt. 1 hr - Rania and Hermain

Notes

- Graphic layout
- Database table

USFE19 - Retrieve user name/passwords when users forget

Description: As a user of the site, I want to be able to easily reset my password when I forget so that I can easily access the site.

Acceptance Criteria

- Password recovery is critical to give users some type of error handling

Tasks

- Add link for password recovery in the log in screen. 1 hr - Rania and Hermain
- Change the password in the database table. 1 hr - Rania and Hermain

Notes

- Wireframes
- Database table
USFE20 - Create graphics with Sketchbook Pro and Photoshop

Description: As a user of the site, I want to have the site’s look and feel be aesthetically pleasing and easy to use

Acceptance Criteria

● All graphics must be compatible with the coding structure and web ready
● Graphics must tie into overall theme of the site
● Any action graphics must be clear to the user to avoid confusion

Tasks

● Agree on color schema and overall design principals. 30 min - Pavel
● Create image layout based on wireframes. 30 min - Pavel
● Save all the PSD files with layers separate from image files intended for the web (jpg, png, gif). 30 min. - Pavel

Notes

● Wireframes
● PSD files

USFE21 - Facebook plug-in

Description: As a user of the site, I want to be able to login with my facebook information so that I can easily access the site and setup an account.

Acceptance Criteria

● By using the facebook plug in it will be easier for customers to log in to our site to set up the account
● Power users can use this feature to quickly user our site

Tasks

● Add link for password recovery in the log in screen. 2 hrs - Rania and Hermain
● Change the password in the database table. 1 hr - Rania and Hermain

Notes

● Wireframes
● Database table
USFE22 - Implement JQUERY rotating slider for the landing page

Description: As a designer of the site, I want to present the users with dynamic rich content on the home page of the site that will drive them to explore the site further and convert sales

Acceptance Criteria
● Allow user to slide/browse through the scenes loaded to the home page
● Create a slider on the home page that can display multiple scenes

Tasks
● Create images to display in slider. 1 hr - Pavel
● Develop slider based on the home page. 1 hr - Pavel
● Create repository of slider images. 1 hr - Pavel
● Create layers for the slider to enhanced interactivity. 1 hr - Pavel

Notes (Additional documentation to provide clarity to the user story)
● Wireframes
● Graphic Layout
● Images to populate in slider

Back_end stories:

USBE01 Create tables for users

Description: As a DBA of the site, I have to create a table for users which includes all usernames, passwords, security questions and answers in order to allow user to log-in to the site.

Acceptance Criteria
● By retrieving the data which stored in this table, the customers will be able to log in to our site.
Tasks
● Create a tables Accounts, Account_Feedback, Accounts_Personal_Inventory, Customer, Dynamic, InterTable_Feedback_Account, Product, and Transaction - 10 min - Hermain
● Populated every table in the schema with attributes - 20 min - Hermain
● Assigned all tables in the schema with proper primary key and foreign keys - 15 min - Hermain
● Created relationship model - 5 min - Hermain

Notes
● Database schema

USBE02 Create ERD diagram for tables
Description: As a DBA of the site, I have to create ERD diagram in order to design the database and modelling data and the relationships between the data that reflects the needs of the site.

Acceptance Criteria
● The diagram correctly represents the data elements communicated during our meeting and data gathering activities
● The relationships derived are validated based on our business rules.
● The ERD correctly names and defines all entities, according to our business rules.
● ERD diagram must represent our understanding of our requirements.

Tasks
● Come up with all entities that we need based on our business rules. 30 min - Rania & Harmain
● Add all needed attributes for each entity. 20 min Rania
● Assign the key attribute of each entity. 15 min - Rania
● Link the entities together by providing their relationships. 30 min - Rania

Notes
● Screenshot of the ERD diagram.
USBE03 Create tables for dynamic content

Description: As a DBA of the site, I have to create tables in the database that include the site’s dynamic content so that I can easily access them.

Acceptance Criteria

- Ability for store data paths used for dynamic content on the front end
- All directory paths must point to the proper tool images
- All directory paths must point to valid data

Tasks

- Create database table which stores directory paths to dynamic data that is stored on our server and displayed on the front end. 15 min - Hermain

Notes

- Database Schema

USBE04 UML sequence diagram for web site

Description: As a programmer of the site, I need to use a UML diagram to easily map out the site model using a unified language in order to align the team and make sure everyone has a common understanding

Acceptance Criteria

- Ability to Show the timing of events in single use case.
- Ability to Show the orders in which activities occur.
- Provide a view of how various business objects interact.

Task

- Create the header portion of the sequence diagram. 15 min - Hermain
- Add all Classes. 10 min - Hermain
- Add all messages invoked by these actors. 10 - Hermain
- Add return values associated with previous messages. 10 - Hermain
- Indicate any loops or iteration area. 10 - Hermain
Note
- Screenshot of the UML sequence diagram.
**USBE05 Configure connections to database**

**Description:** As a DBA of the site, I have to setup the database connection and ensure that the connection is working properly so I can access and retrieve the data.

**Acceptance Criteria**
- Ability to retrieve content out of our database for inclusion in a web page.
- By connecting to our database, the website will be able to retrieve the products information to display them.
- By connecting to our database, the users of the site will be able to retrieve their information.

**Task**
- Establish a connection string to connect to Access database from inside a PHP script. 45 min - Rania
- Test the connection. 15 min - Rania

**Note**
- Connection statement
  ```php
  $connection = new COM("ADODB.Connection") or die("Cannot connect with database");
  $connString= "Provider=Microsoft.Jet.OLEDB.4.0;Data Source=e:\ectserver\RALMAJAL\Database\tools.mdb";
  $connection->Open($connString);
  ```

**USBE06 Create Database Security Table**

**Description:** As a DBA of the site, I have to setup the database security to allow for user information to be stored safely and avoid potential security risks

**Acceptance Criteria**
- Ability to protect customers personal and login (username/password) data

**Task**
- Create two different database tables; one contains the customers personal information and the other contains the contains the customers credentials such as username, password, and security questions. 15 min - Hermain

**Note**
- Database Schema

**USBE07 Create database triggers**

**Description:** As a DBA of the site, I have to set up database triggers so the database is correctly and efficiently called from the site, and ensure that all users information is presented with the correct information.

**Acceptance Criteria**
- Ability to manipulate relational data with very high performance.
- Ability to guarantee that when a specific operation is performed, related actions are performed.

**Task**
- Identify all triggers needed. 1 hour - Rania & Hermain
- Code the triggers. 1 hour - Rania & Hermain
- Test the triggers and ensure that the overall behavior of the each triggers identify it. 45 min - Rania & Hermain

Note
- Database SQL code
  
  **Create or replace**
  **trigger UpdateCustomerData after update or delete on Account_Personal_Inventory**

**USBE08 UML activity diagram for website**

**Description:** As a programmer of the site, I need to understand the user flow through the website so that I can build the site logic correctly.

**Acceptance Criteria**
- Ability to illustrate the flow of events that the use cases describe.
- Ability to describe the most important workflows of the website.
- Ability to ensure the correctness of both the specified design and the sequent implementation.
- The diagram provide all details of the functionality desired in the website.

**Task**
- Define the behavior of site operations. 20 min - Hermain
- Come up with activities that we provide in our site. 30 min - Hermain
- Define all actions. 30 min - Hermain
- Add all control and object nodes. 30 min - Hermain
- Add a needed activity edge to direct connection between two activity nodes. 15 min - Hermain

**Note**
- Screenshot of the UML activity diagram.
USBE09 UML actor diagram for website

Description: As a programmer of the site, I need to understand how different user types will interact with the website so that I can build the site logic correctly.

Acceptance Criteria
- Ability to define all actors who plays a role in one or more interactions with our site.
- Ability to provide some observable and valuable result to the actors of the system.

Task
- Define all actors. 10 min - Hermain
- Associate each actor with one or more use cases. 15 min - Hermain
- Adding relationships to provide clarity between use cases. 10 min - Hermain

Note
- Screenshot of the UML actor diagram.
USBE10 Create test case scenarios
Description: As a programmer of the site, I need to build test scenarios for potential users of the site in order to have the programming tested to detect and fix any potential bugs
Acceptance Criteria
- Ability for business users to test the site functionality and approve or disapprove
- Test cases are easy to follow for all types of users and focus on key areas of site functionality
Task
- Identify key areas of the site that need to be tested. 1 hr - Chris
- Develop test cases that can easily distributed to testers. 1 hr - Chris
- Collect user responses and track and bug fixes that are needed. 45 min - Chris

USBE11 Create work specs documents
Description: As a programmer of the site, I need to document all of the websites changes which require code updates.
Acceptance Criteria
- Any changes to the Code that could impact the business needs to be validated and tested by the business before implemented and released.
Task
- Create Work Specification documents detailing any and all coding changes that were made. 30 min - Hermain
- Test scripts need to be given to the business. 30 min - Hermain

USBE12 Session state
**Description:** As a programmer of the site, I have to setup and test session in the website’s pages in order to pass and remember the user data from one page to another.

**Acceptance Criteria**
- Ability to share users data between pages.
- Ability to controls the lifetime of the “login operation”

**Task**
- Start the session when needed. 30 min - Rania
- Reuse the stored session and hold them in all pages. 30 min - Rania
- Destroy all session variable information that has been stored when needed. 30 min - Rania
- Test the session state. 15 min - Rania

**Note**
- Session statement code example.
  
  To start the session in log-in page
  ```php
  session_start();
  $_SESSION["User_Name"]=$_POST["User_Name"];
  $_SESSION["User_Password"]=$_POST["User_Password"];
  
  To reuse the stored session in other pages.
  ```

**USBE13 Data encryption**

**Description:** As a programmer of the site, I want to write a function that encrypt and decrypt the usernames and the passwords of the site’s users so I can’t read the original usernames and password of users to ensure the security of the site.

**Acceptance Criteria**
- Ability to encrypt the user-name and password correctly.
- Ability to decrypt the user-name and password correctly.

**Task**
- Come up with a way to write the functions. 15 min - Rania
- Write a function to encrypt the user-name and password. 1 hour - Rania
- Write a function to decrypt the user-name and password. 1 hour - Rania
- Test the encryption function. 15 min - Rania
- Test the decryption function. 15 min - Rania

**Note**
USBE14 Payment processing

Description: As a programmer of the site, I need a way to maintain our transaction fees on our customers and process the markup to the site so that this business can generate revenue.

Acceptance Criteria
- All transactions between the Renter and the Lender incur our site's transactions fee which need to be properly maintained
- Payments made to our business need to be accurate

Task
- Create a database table to store all our payment transactions. 10 min - Hermain
- Create a function to automatically charge lenders and buyers when transactions are made. 1 hr - Hermain

USBE15 Booking and renting calculations

Description: As a programmer of the site, I need to be able to calculate booking and renting prices so that the rentee knows how much to charge for their equipment.

Acceptance Criteria
- Renter should be able to see how much he will pay before rent the tool.
- Ability to calculate and return the total correctly.

Task
- Create a function that take the tool’s price and number of days in order to do the calculations. 1 hour - Rania & Hermain
- Display the total to the presentation layer to allow the renter to view it. 1 hour - Rania

USBE16 Customer Management

Description: As a programmer of the site, I need a way to maintain customer profiles so that users are able to login and manage their customer information within the site. I also need this info to process orders on the site.

Acceptance Criteria
- User profiles are maintained in the relational databases and any changes made by the users are reflected there
Users can access their profile by logging in as a renter or rentee of the site
Any orders that are placed should be stored and can be accessed by the user

**Task**
- Create the database to store the customer data. 30 min - Hermain
- Link database to the presentation layer to allows users to setup and manage their profile. 1 hour - Rania & Hermain

**Note**
- Database schema

**USBE17 Rentee Management**

**Description:** As a programmer of the site, our rentees need a way to manage their product inventory so that customers can view the offering on the site and place orders.

**Acceptance Criteria**
- Inventory changes can be managed by rentees of the site and should be reflected in the inventory database
- Inventory can be access and maintained by the rentees when logged into the site
- Rentees are able to mark tools as in or out of inventory which will inform renters on what are available

**Task**
- Create the database to store the current product inventory. 30 min - Hermain
- Link database to the presentation layer to allows users to view the current inventory levels. 1 hour - Rania & Hermain

**Note**
- Database schema

**USBE18 Inventory Management**

**Description:** As a programmer of the site, I need to have an inventory management and tracking module so that renters and rentees can track their transactions and properly do business

**Acceptance Criteria**
- Any inventory changes are stored in the database and reflected on other pages on the site to potential renters
- Rentees are able to mark tools as in or out of inventory which will inform renters on what are available
- Rentees are informed when a renter wants to rent a particular item they have in their inventory

**Task**
- Create the database to store the current product inventory. 20 min - Hermain
- Link database to the presentation layer to allows users to view the current inventory levels. 1 hour - Rania & Hermain

**Note**
- Database schema

**USBE19 Rating management**
**Description:** As a programmer of the site, I need way to store and display ratings of renters and rentees so that users of the site can more confidently choose which other users they would like to interact with

**Acceptance Criteria**
- Ratings can be accessed on the site for both renters and rentees
- Any rating changes are updated in the database

**Task**
- Create the database to store the user ratings and tie them to user profiles. 20 min - Hermain
- Link database to the presentation layer to display ratings when users log in. 1 hour - Rania & Hermain
- Create presentation layer of site to accommodate for rating display. 1 hour - Rania & Hermain

**Note**
- Database schema

**USBE20 Create Database indexes**

**Description:** As a programmer of the site, I need way to quickly retrieve data from the database and present it to the users of the site to meet their usability expectations

**Acceptance Criteria**
- Content stored in the relational database is accessed and displayed quickly and accurately on the site

**Task**
- Create the relational database and load the data. 20 min - Hermain
- Create indexes on specific database columns to improve performance. 30 min - Hermain