1. **Vision**

New release of DRD (Dumpster Rentals Depot) System is a new, modified version of the existing DRC (Dumpster Rentals Cooperative) web application. Unlike the current version the updated release will introduce a new mobile friendly web design combined with SEO friendly web copy (web content). In addition, the new release of the System will possess new features including:

* Integrated billing system
* Multilingual capabilities
* Improved reporting & accounting capabilities
* Revised and improved mechanisms of System/ User Interaction.
* Revised and improved web copy (manual & automatic)
* Interfaces for User Generated Content model where possible and applicable.

It is anticipated that the New Release of the System will help to achieve the following business benefits:

* **Hard Benefits**
* Improved position in search engines
* Improve conversions
* Increase in sales
* **Soft Benefits**
* Improved Dumpster Rentals Depot company’s image and brand
* Improved usability (increase user’s effectiveness, eliminated bugs/incompatibilities )
* Improved maintainability

*Tasks for the project initiation phase:*

* *The best hosting company/plan*
* *Optimal development technology. Upgrade to a new version of Jango.*
* *Determine and setup Development & SIT Environments*
* *Approve conceptual web design for the home page*
  + *Simple*
  + *Functional*
  + *Good looking*

*Project development methodology*

* *Communication Plan (frequency of Status Meetings)*
* *Resources (allocate and commit)*
* *Project methodology (Agile lifecycle) . User’s Story based development. Early and frequent delivery.*
* *Roles & Responsibilities*

1. **User Classes**

|  |  |  |
| --- | --- | --- |
| **#** | **User Class** | **Description** |
| ***1.*** | ***Website Administrator***  ***(Admin)*** | Website Admin is a ‘power user’ that has access to all the user interfaces. |
| ***2.*** | ***Customer Support Representative (CSR)*** | CSR is an administrator with limited access (restricted interfaces, for example, are ‘Member Payment History’, ‘New Financial Operations’, ‘Bid Policies’, etc.) |
| ***3.*** | ***Customer (Business Owner - BO)*** | An owner of a Dumpster Rentals Company. A ***BO*** has read/write access to password protected interfaces that are relevant to his own company. |
| ***4.*** | ***Buyer (Site Visitor)*** | An Internet user that is looking for dumpster rentals and junk removal services. It is assumed that Customer has navigated to DRD web site. |

1. **User Stories**
   1. **Business Owner’s Stories**
   2. If a Customer submits more than one quote request and contact request on the same day, I would like to be charged only once.
   3. If a Customer submits more than one quote request and contact request on the same day, I would like to receive just one notification message because when I receive more than one it makes me think that I’ve been overcharged.
   4. I would like to have all values in ‘Date’ column of Quote Request and Billing Summary screens formatted like DD-MM-YY (e.g.  ‘14-Sep-12’) and sorted descending (the most recent date on the top of the list).
   5. I would like to have all the interfaces that are pertinent to my company to be labeled with my company’s name.
   6. *I would like to receive quote requests/contact requests from the customers in my local service area. For example, if my company located in Toronto, ON, I should not receive requests for quote for Vancouver, BC delivery.*
   7. I would like to be able to run reports: ‘Quote Requests’, ‘Contact Requests’ and ‘Click-to-Call or Call Routing’ Reports for specified timeframe (default is the last 30 days).
   8. On ‘Display Quotes’ screen I would like to be able to see all the referral submitted to my company and charged for. For example, in addition to the list of ‘Quote Requests’ (current functionality), I would like to see details of ‘Click-to-Call’, ‘Call Routing’ and ‘Contact Requests’.
   9. I would like to be able to track my referrals information using different interface for each Company Profile/Service. For example, let’s say I have a Toronto Profile that offer Dumpster Rentals, Excavation and Demolition Services. For each of the listed above services I would like to have the following interfaces:
      1. Quote Requests
      2. Pay Per Referral Bids
      3. Billing History (this screen will display only the charges related to a particular service. For instance, all the charges associated with dumpster rentals quote requests, contact requests and phone engagements)
   10. I would like to have an interface ‘Billing Summary’ where I’ll be able to see all the charges associated with all the services. The list of the charges shall include all the referral fee charges for all the services (dumpster rental, snow removal, demolition, excavation etc.).
   11. **When creating a company profile I would like to be able to specify the sizes of dumpsters that I have in my inventory so customers order only the container size that I have.**
   12. On ‘Billing Summary’ screen I would like to see the referral details (customer’s name, delivery location, customer’s phone, duration of call, etc.).
   13. I would like to see historical records sorted descendant. For example, I would like to see the latest requests for quote (submitted today) at the top of the list followed by the requests that were submitted earlier (submitted yesterday and further in the past).
   14. When I receive a new Quote Request I would like to be able to hit ‘Reply’ button on my mail client application interface and e-mail the message to the sender (the customer that submitted request for quote).
   15. **When editing a company profile I would like to be able to create a content that is unique for each of the cities listed as my service coverage area. In other words, I shall be able to modify a so called Main Profile to achieve uniqueness of Local Profile pages. All Local Profile pages should have unique Titles and Descriptions and they shall be linked to a Parent Profile page.**  For example, the page <http://www.dumpsterrentals.ca/dumpster-rentals-toronto/> that currently displays Purple Dumpster Rentals as a Primary Service Provider shall have links to ‘Local Pages’

* <http://www.dumpsterrentals.ca/find-dumpster-toronto/purple-dumpster/>
* <http://www.dumpsterrentals.ca/find-dumpster-campbellville/purple-dumpster/>
* <http://www.dumpsterrentals.ca/find-dumpster-milton/purple-dumpster/>
* Etc.
  1. **When I create several company profiles on the account, I would like to be able to maintain just one account balance instead of managing account balance for each separate profile.**
  2. **I would like to be able to create a User Account that would allow me to create one or more company profiles**
  3. **I would like to be able to create a company profile**
  4. **I would like to be able to specify one or more services associated with each of my company profiles**
  5. **For each of the services associated with my company profile I would like to be able to allocate one or more location (cities or towns) as my service coverage area**
  6. **For each of the services associated with my company profile I would like to be able to set/edit an amount of bid for every city in my service coverage area. For example, I should be able to set a bid amount of $7.00 for a Dumpster Rental Quote Request in Toronto and set a bid amount of $50.0 for Demolition Quote Request in Mississauga.**
  7. **I would like to be able to login to my Company’s Dashboard.**
  8. I would like to be able to reset my password.
  9. I would like to be able to ask for support (via e-mail).
  10. **Website Administrator’s Stories**
  11. I would like to have all the interfaces, forms, screens, pop-up windows that are related or relevant to a particular company be labeled with that company’s name.
  12. I would like to be able to filter out all the Suspended companies on ‘Control Panel’ interface with options to see ‘All Companies’, ‘Active Companies’ (default), Suspended Companies’ .
  13. On Member Billing History screen I would like to be able to identify the charge by viewing charge details like, for example, customer’s name, delivery location, etc.
  14. I would like to have System generating and sending ‘Thank you for your payment’ message upon receiving a payment from a customer.
  15. I would like the screen that collects Quote Request information (Submit Quote Request page) offer a customer to specify phone extension in a provided data entry field.
  16. I would like to be able to block robots/spammers from contaminating our blog with placement of spam comments programmatically.
  17. I would like to have Service Providers page displaying only three companies on the page: Primary Service Provider and two secondary service providers.  The rest of the companies shall be moved to a new (additional) page.
  18. I would like to have the layout of the Blog Posting interface to be modified the way that would enlarge the editor window and that editor would allow upload images (images to be displayed within blog posts).
  19. As an Admin, I would like the System sort dumpster rental companies using the following algorithm:
      1. ‘Bid Amount Sorting Rule’: The higher bidder is displayed above the lower bidder. This means that the top bidder is to be displayed on the top of the page as a ‘Primary Service Provider’. For example, if a company (Company A) is bidding $5.00 (willing to pay $5.00 per referral) on a particular location (‘City’), and another company (Company B) is bidding $5.01 on the same ‘City’, then the System shall display the Company B above the company A.
      2. ‘Seniority Sorting Rule’: If the bidding amount is the same, then the System shall sort service providers based on seniority. In other words, if company A is bidding $5.00 on a particular ‘City’, and Company B is bidding $5.00 (the same amount) on the same ‘City’, but Company A’s profile was created before the profile of company B, then the System shall display a Company A above the Company B.
      3. IMPORTANT: The System shall display the companies with low account balances (when the account balance is not sufficient to cover the cost of even one referral) at the very bottom of the list, below the companies with sufficient amount balance. If there are more than one company with the low account balance, then the System shell use ‘Bid Amount and Seniority’ sorting rules (see above).
      4. The System shall display only up to three service providers on the page ‘Service Providers’ dedicated to a particular city. At the bottom of the page there shall be a link ‘See all dumpster rentals in [City Name]’ that will load the page titled as ‘All Dumpster Rental Providers in ‘City Name’ where all other providers, if any, shall be displayed, sorted using the same sorting algorithm.
  20. As an Admin, I would like the System store to the database all the Quote Request related information including
* Date
* Company Name
* Customer contact info (name, address, etc.)
* Type of waste
* Desired dumpster size
* Desired delivery date/time
* Indication of whether the Quote Request was delivered or it was bounced because of the low account balance and was not delivered to anybody.
  1. **Support Representative’s Stories**
  2. **Customer’s Stories**
  3. When filling up a Request for Quote online I would like to see exact inventory of the company that the Request will be submitted to. For example, if the company has only 5, 10, 15 yard containers, I don’t want to be able to select 40 yard from drop down because the company doesn’t have this size.
  4. On the message “Thank you for your request” I would like to have the following information: Company Name, Company Phone, and Company E-Mail. The message itself shall have a noticeable warning ‘DO NOT REPLY’.
  5. *In case my Quote Request submitted to a local company, I would like to be able to hit ‘Reply’ button on my mail client application interface and have the message e-mailed to that local company rather than to* [*admin@dumpsterrentals.ca*](mailto:admin@dumpsterrentals.ca)*.*
  6. When I make a payment I would like the System accurately calculate GST/HST taxes and include the tax amount in total payment amount.
  7. As a customer, I would like the System determines the geo IP location of a my client device upon loading and then fills (populates) the home page [www.dumpsterrentals.ca](http://www.dumpsterrentals.ca) with different content based on geo location of a client computer. The System shall perform as indicated in the Action Table below:

***Determine GEO IP action table***

|  |  |  |  |
| --- | --- | --- | --- |
| Geo IP determined? | Content of ‘**Near’** text box | Popular Dumpster Rentals Locations  (from left to right): | Comments |
| Yes | Found location, for example, **Toronto, ON** or **Vancouver, BC.** | -Primary Service Provider if not indicated by Admin  - Indicated by Admin  - Indicated by Admin | An Admin is supposed to be able to indicate what companies shall be displayed ***province-wide*** |
| No | Display ‘Where’ | - Indicated by Admin  - Indicated by Admin  - Indicated by Admin | An Admin is supposed to be able to indicate what companies shall be displayed on the Home Page |

1. **Non-Functional Requirements & SEO**
   1. Replace labels ‘Submit’ with ‘Send’ on all the buttons and interfaces throughout the site.
   2. Obtain the required certificates and implement https protocol for SEO advantages.
   3. Make sure the web site is mobile optimized and it is qualified for ‘Mobile Friendly’ label

* Avoid software that is not common on mobile devices, like Flash
* Use text that is readable without zooming
* Size content to the screen so users don't have to scroll horizontally or zoom
* Place links far enough apart so that the correct one can be easily tapped
  1. The System shell recognize 4 different User’s Access Levels & Permissions:
     1. Admin User – upon login, Admin is allowed to access any interface of the System. Admin has Read/Write Permission with limitations listed in ***BR-11 Billing History***.
     2. Customer (Business Owner) – upon login, Customer is only allowed to access company profile information, billing history and referral history that is related to his own company. Customer has Read/Write Permission with limitations listed in ***BR-11 Billing History***.
     3. Customer Service Representative (CSR) – upon login, CSR is allowed to access any of admin interfaces except interfaces that display financial data. CSR has Read/Write Permission
     4. Blogger – Blogger has access only to those interfaces that are related to publishing blog posts. See ***BR-12 Blog Moderator.***

1. **Appendix**
2. **Diagrams**

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***Diagram – 1***

1. ***E-mail* Messages**
   1. ***Welcome to Dumpster Rentals Depot (Create account message)***

# Welcome to Dumpster Rentals Depot!

Dear Waste Management Professional,  
  
Welcome to Dumpster Rentals Depot and thanks for signing up. Dumpster Rentals Depot is an **Internet Marketing** tool that immediately increases your company exposure to the local market. Our goal is to help your customers find your company online using their computers, smartphones, tablets, etc..  
 **Sign in to your account here: the URL of Login Page**

**Your username:** [**UserName@DomainName.com**](mailto:UserName@DomainName.com)

**Your randomly generated password:** password  
  
We hope you and your team enjoy using Dumpster Rentals Depot Internet marketing services and find it actionable, productive and cost-effective. Don't hesitate to reply to us with your feedback. It can only help us make Dumpster Rentals Depot even better!

Harry Cotten.

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