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**Workers Sales & Benefits System**

**Software Requirements Specification (SRS)**

**and**

**Software Preliminary Design (SPD)**

Author: Ori Ahdout | Date: 23-08-2016

Solution Tiers (Technical)

Presentation (**Site**- API + Responsive Client Front, **Admin**- Regular Site, Future dev: **Mobile App** in NativeScript)

BL (Business Logic Layer & Business Entity Layer)

DAL (Data Access Layer)

RDBMS (Relational Data Base)

User Types

The types of users in the system are:

* Company Representative (Company person)
* Worker
* Administration personal (Admin person)

Pages

Company Side

1. Main Page
2. Workers Lobby Page (list of all company workers)
3. Worker Info Page (View only)
4. Company Person Settings Page

**Worker Side**

1. Main Page
2. Register Page
3. Login Page
4. Forgot Password Page
5. User Settings Page
6. My Orders Page (Purchase history)
7. Categories Page
8. Product Page
9. My Cart page
10. Commit Order Page
11. Payment Page
12. Contact Us Page

Admin Side

1. Main Page
2. Companies Lobby
3. Company page (Add,Edit,Delete).
4. Company Person Lobby (per company)
5. Company Person Page.
6. Workers Lobby (per company)
7. Worker page (Add,Edit,Delete).
8. Categories Lobby
9. Category page (Add, Edit, Delete, Order).
10. Products Lobby (per category)
11. Product Page.
12. Orders Lobby (including Vouchers)
13. Order page (View only).
14. General Settings page
15. Contact Us Messages page

\* each admin page allows navigation to its associated info, e.g: employees lobby to worker page.

\*\* Coupons will be treated for all site matters to be a 0 (zero) priced order.

Company Side Flows

**Workers Lobby page**

Shows a list of all workers in the company, with the name of the worker, id, phone number, and last log in date.

**Worker Info Page**

Shows information of a single worker (View Only), His name, Id number, email, phone number, and last log in date, NO PASSWORD.

**Company Person Settings Page**

Allows the company person to change his info, that is his name, email, and phone number.

Worker Side Flows

**Main Page**

Main Menu (top of screen) -> All Categories, Register,Login, My Orders, User Settings

Register button-> opens register page (as popup).

Login button-> opens login page (as popup).

My Orders -> opens my orders page

User Settings (User Badge) button -> opens User Settings page.

Search product (top of screen) -> performs linear search.

Front Product Slider -> Opens product page

Front Categories (With see more option) -> shows primary products in the category and opens category page.

**Register Page (Pop-up)**

User specifies id-number and phone number, presses on send.

The system will send the user a code-verification to his phone.

The user will put this number in a designated box, and then will be prompted to select a password, and put his email.

The user will now be registered in the system.

**Login Page (Pop-up)**

The user will be entering the system using Phone number and password only.

**Forgot Password (Pop-up)**

A Forgot-Password mechanism will be used via phone, once the user enters the code correctly, he will be prompted for a new Password/ Verifiy Password, and will be acknowledged that the new password is now valid.

**Category Page**

**Shows all products inside a category in a grid/table/ list view.**

For each product there will be a title, Price info (normal, discount, shipping, final),

**Product Page**

Shows all information around a product, which includes:

Large picture, and other pictures.

Product details.

Technical details.

Normal Price, Discount, Shipping, Final price.

**Contact Us Page**

A page where a user can post a message,

Will have a large text box for "Message Content",

And a combo-box for "Message Subject" which the user will pick from.

And a "Submit" button

**My Orders Page (purchase history)**

Shows all orders of a specific user, in a grid/list view/ table.   
For each order there will be the title of the product, order date,

Actual price paid(base+shipping), and a small image.

**User Settings Page**

A page where the user may alter his settings and preferences,

Will include: a first and last name, id number (readonly), phone number (readonly) ,email address, change of password (Password field and Verify Password), and some other settings/preferences.

**My Cart Page (Pop-up)**

A feature that will allow adding of items through-out the site, and once the user has decided, will go to verify order page.

**Verify Order Page**Will show all ordered items in a list, for each item there will be a small picture, title, price.

**Payment Page**

This is the final payment page for the site, might be a 3rd party page, will allow entering credit card details, and shipping information, and submitting the order.

**Admin Side Flows**

All admin pages will consist of the same behavior and presentation and will include:

* Add New Item
* View Item
* Edit Item (not for all pages)
* Remove Item (Mark as Inactive!)
* List of all active items.

**Special Behaviour Pages:**

Products Lobby Page -> Will allow ordering the products by most viewed to least viewed (which products to show more).

Categories page -> Will allow ordering the categories by most view to least viewed (which categories to show more).

Company Page-> Will allow bulk import (through excel),

Also will allow selecting which categories will be shown for each company.

The Running components in the system (Server side)

- Users Web API – exposes normal users site functionality (desktop,mobile web, and native web (in the future).

- Administrators Web API – exposes admin users site functionality.

- Payments service (web service) – running service that handles all payments and billing. \*\*

- Sync service (web service) – allows synchronization and notification between services in the system. \*\*

- CleanUp service (cron) – handles clean up of old images and other data. \*\*

\*\* Will be created as needed.

Logging and Error (Exception) handing - Server side

All logging will be handled using Log4Net library and will be dumped into 'C:\Logs\WerkersBenefits' folder of the running server. Logs will be kept for a few days and then automatically deleted.

Any critical errors and warnings will be documents using logs and treated accordingly, a compensation model will be used when required (mostly in the payments system).

Configuration and Settings

The system will allow configuration for the worker,company, adminPerson, and global levels, and will be kept in the data base, and also in the configuration files (web.config, app.config).

\*\* Any database configuration will precede its equivalent config-file one.Entities

Objects:

Companies (employers) - a company that is registered in the worker benefits system.

Worker – a worker under a company.

Product – a product that is offered in the system (either real or vouchers)

Order – an order of a worker.

Categories – a category of multiple products.

CompanySettings – company settings (key value pair)

WorkerSettings – worker settings (key value pair)

ContactUsMessages – contact up message.

AdminPersons – an administrator person that is registered to the system.

AdminPersonSettings – admin personal settings (key value pair).

Aspnet basic:

User – a user in the system (company, worker or an admin person)

Role – a role of users in the system.

UserRole

UserClaim

UserLogin

Enums:

ProductType {Real ,Voucher}

Implementation

Server side Client API will be implemented using Microsoft ASP.NET MVC 5 (Web API 2) Single-Page-Application project.

Server side Admin API will be implemented using Microsoft ASP.NET MVC 5 (Web API 2) project.

Server side internal web services will be implemented using Microsoft Windows Communication Foundation Duplex (WCF) service, or a Node JS application.

Client side will be implemented using Google's Angular JS v4.0.

ORM (Object-Relational-Mapping) will be Entity Framework v6 in conjunction with Raw-SQL Stored Procedures.

Relational Database Management System (RDBMS) will be Oracle's MySQL DB.

Source Versioning Tools

Server side will be kept in TFS/GIT.

Client side will be kept in GIT.

Storage and Content Delivery Network (CDN)

The system will not include Content Delivery Networks, All images will be kept in the server.

Responsiveness for mobile

The site will adapt to mobile devices (Android and IOS).

**Document Version History**

**Date Version Change Author**

23-08-2017 1.0 Create Ori Ahdout