Pocket XL
Midterm Report

Implementation prototype of new retail sales module of CDN XL

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# CHANGE HISTORY

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I. Revised Objectives

The objective of this group is to produce barcode scanning software for warehouse acceptance. This means that when a warehouse receives an item (or items) information is generated about that item from its barcode that lets a warehouse worker know where the item should be stored in the warehouse. At the end of this project we should have a solution that is ready for verification of specifications by a Comarch deployers.

Our software should meet several criteria:

- Integrated into CDN XL which is Comarch ERP solution software.
- Make use of its algorithm to improve the efficiency of a warehouse by directing the employees to where items should be stored in the warehouse.
- Foolproof to minimize the effects of human error.
- Capable of multinational use and will include a language pack for Polish and English.
- Have a minimal learning curve in order to be an effective and marketable product.
- Identify some possible market niches that would benefit from Pocket XL

Some aspects of the software should be customizable after the prototype stage such as the format of barcode it will read, what type of mobile device it will run on and the appearance of the graphical user interface. The customization capabilities will not be implemented in this project since our software will be a prototype.

There have not been any major changes to the objectives. One important addition, however, was adding the objective of identifying market niches for Pocket XL. This objective was added in order to add value to the project by presenting initial ideas of possible customers. Other changes that have occurred pertain to aesthetics and implementation of the software. The details of those changes are not relevant to this report.

II. Results to Date

At this point in the semester we are in the third week of of the overall term. The first week included an orientation to introduce us to the company and the project we were assigned to. During the first week we also completed setup of necessary software on our workstations.

Progress on the prototype in the past two weeks has been significant. Up to this point we have accomplished the following:

- Functioning graphical user interface (GUI) for item relocation
- Created an intra-warehouse movement document on the server
• Ran the algorithm for producing hints and verification
• Created a facade to hide information between the server and the GUI
• Created test cases to verify functionality
• Minor debugging on the facade, server, and GUI

Important feedback from the deployers verified that the initial design of the GUI met the specifications for simplicity and ease of use. This feedback is useful since the team can move forward in using the same style to create the GUI for the remaining use cases.

III. Revised Task/Event Schedule

The figures provided below show the schedule for the semester.
The only chance made to the timeline was the addition of the C# workshop during week two. The rest of the timeline follows the initial plan to follow our spiral model of methodology.

IV. Changes in Tasks, Roles, and Organization
IV.1. Functions and responsibilities in project

IV.1.1. Project Manager

Mirosław Jedynak – oversee entire project by communicating with the deployer and assigning tasks to interns. Assist the interns with their tasks as needed.

IV.1.2. Mobile Device Programming

Sebastian Babel – design and implement GUI of mobile device.

IV.1.3. Server & mobile device communication

Michał Waśniowski – design and implement communication between the mobile device and the server.

IV.1.4. Server program

Tomasz Kijas – implement location algorithm on the server.

IV.1.5. Testing and verification

Francisco Garcia – run test cases on program at the end of each stage and report any errors. Research the market feasibility of the software. Keep track of all deliverables and their submittal on iGROUPS.

For the most part the roles have not changed. The only change has been in adding market research responsibilities in order to better justify the goal of the project.

V. Barriers and Obstacles

The major obstacle encountered since the very beginning of this project was the unfamiliarity of the group with the C# programming language. This language is similar to the Java programming language which the computer science students of the group are familiar with. However, for a project of this scope it is essential that the programmers understand the important features of C#. In order to compensate for this our supervisor and the supervisor of another group gave lectures on C# for the team members whose primary responsibility was to write code. Given that the Polish students are the primary programmers the lectures were given in Polish in order to ease the learning curve.

The language of the program proved to be another obstacle. Our Pocket XL program is intended to be localizable – meaning that the language can be set according to the customer. This
The program is to be integrated into CDN XL which was written in an old programming language in Polish. Our programmers have to figure out how to integrate a program written in a relatively new programming language (in English) into a program written in an old programming language (in Polish). The lectures given by the supervisors partly addressed this issue but the programmers have more to figure out in terms of how CDN XL works.

Our weekly progress depends on the feedback and specifications we get at the beginning of each week from the deployers. The obstacle is in waiting for the deployers – who are also working on other projects - to take time to review our work and then provide the necessary feedback. Aside from their feedback on our most current progress they might provide us with new specifications. There is progress that can be made while waiting for feedback from the deployers.

On the programming side there are tasks that are generally good practice but are not directly connected to requirements. This involves optimizing code to work more efficiently and be easily modifiable in the future.

Market research can continue throughout the course of this project as this initial research will only involve identifying general market niches that are currently targets of Comarch and would benefit from Pocket XL.