

MEGACELL's report  
CT30A9301 Code Camp on Platform Based  
Application Development  
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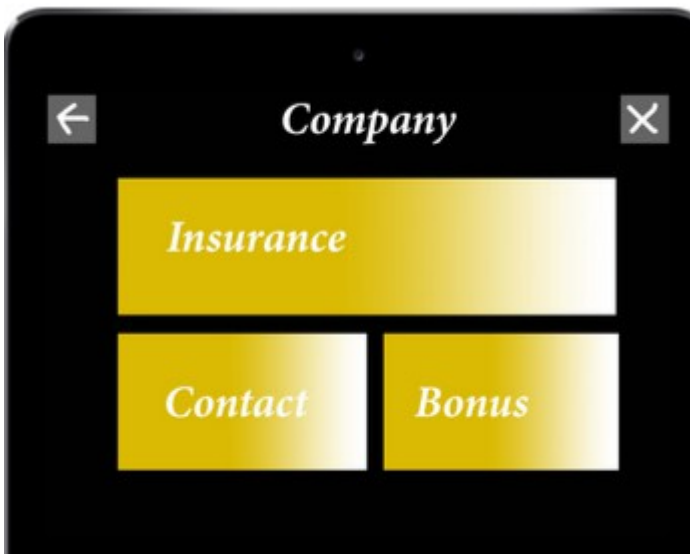
# Introduction

We are MEGACELL, two man team of first year students. Mika is our lead programmer and Juuso is the lead designer. We participated this code camp to learn more on programming and group working. In our opinion code camps are the best learning experience since they resemble real work more than the typical courses in LUT. Code camps have more freedom to work on a given subject and they have more freedom on working times so you can chose when to work and when to have pauses.

We don't have a lot of experience with coding. We have only been in two programming courses and in one earlier code camp called FGJ (Finnish game jam). We know how to code basics with python and C, but our coding style and coding needs a lot of work. Prior knowing this code camp we had no experience programming with C# or XAML. Mika studied basics of C# before attending to the code camp and practiced a bit with Visual studio 2013. We also knew that Juuso had exams in middle of code camp and it would increase work we had to do.

# Idea

Juuso has previously worked as a salesman so we began to brainstorm based on that. Our base idea was to make the first contact with bypassers as easy as possible. So we made our first prototype with Marvel prototype application and started planning menus and basic navigations. In the beginning we wanted to keep it as simple as we could and build up from what we had.



First design

We had a clear idea on how we wanted the application to calculate an offer how much a house insurance would cost for a random bypasser. It had to be very quick and painless. The calculation also had to be possible to make even with incomplete information and updatable at any point.

We also had ideas that didn't make it to the final product. We cut them out because we didn't have enough time or knowledge to include them. Many of our problems had something to do on the fact that neither of us is particularly good at coding.

For example we would have liked to add a feature which had a map near the location of the device used. The person using the application could point where their house was and the required information would automatically fill itself on the form. The feature could have been a nice twist. Another good feature we thought about was a barcode reader. Reading information from a driver's license or social security card would significantly reduce the time needed to fill the form.

Juuso's idea on the design was based on the common Windows 8 tiles. Juuso added some color and a few things not so loyal to the base idea but that was mainly to get more freedom in the graphical part of the design. The layout was very simple but the tiles themselves went through many different drafts and prototypes. In the end we still went with a simple but good looking option.

## Coding

We had a lot of problems with coding because we are new to C# and XAML and kinda new to coding in general. We have little experience with python and C but no experience on C#. Mika started practicing little with visual studio 2013 before code camp. Mika did most of the programming since he had the experience and if Juuso did the programming, Mika would just help him all the time.

C# had a lot in common with C and XAML had also reminded visual studio so it was easy to get started. We started doing our program based on our demo. Doing basics was easy like adding buttons and making program move between rooms. Our first problem was how to carry values. But after little bit of studying and help from the code camp, we realized we had been using wrong way to move between rooms. After we changed the code, it was easy to add value carrying to code.

Our first huge problems was with database. First at all we didn't know how to do database and luckily we got help from the code camp. We got great tutorial from one member from code camp. After reading the tutorial we got we still had a lot problems understanding how to add database. We couldn't find the right options that we shown in the tutorial, but again we got help from the code

camp to find the solution. After we wrote the code following the guide from Internet, it had some errors and program crashed multiple times. Even the older student came to help us and couldn't find the solution until we realized we had forgotten add couple basic things to the class and it was hard to realize that was the problem because error correction pointed to wrong place.

After we got the database working we tried program on a tablet. In the start it worked fine until it got to the point where program had database implemented. There it crashed. We tried to find solution to the problem but we couldn't so we just had to comment the database out to have program ready for presentation.

## **Presentation**

Juuso would be at the exam while we had to do presentation and Mika is not that great doing presentations so Juuso did a great slideshow for presentation. So all Mika had to do in presentation is read the slides. Night before presentation Mika read the slides and talked with Juuso about the presentation so Mika would be prepared for presentation.

We were the last group to have presentation. It was kinda stressful since last presentation is usually remembered the best. Presentation went well in our opinion even though Mika froze couple times and forgot to say somethings what he was supposed to say. But the Juuso's slideshow helped a lot doing the presentation.

We got honorable mention from best presentation from what we were extremely surprised. We got it from our way to presenting the problems with marketing and how to solve the problems. So we got from the content of our presentation not the way we held the presentation. So basically we got honorable mention because of Juuso's slideshow.



Slide from slideshow

## **Last feelings**

As FGJ this code camp was a great learning experience. We learn how to program with C# and XAML. C# reminds Java so it will help us in the future courses. We also learned how to have better coding architecture so it is easier to add more features later to the same program. As first year student it is kinda hard to do complex program with a lot of features like other groups did but we got honorable mentions what was great and makes us motivated to try harder in the next code camp.