*Non-intrusive chat application*

*Miniproject in course “Designing the User Interface”*

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*Abstract*—*The objective of this chat application was to create some that will look good, will not have disturbing effects and will be without unnecessary functions. The application should be also user-friendly and intuitive. Problem with the existing chat applications is in their intrusive behavior, that force you to spend more time while using int than it’s necessary, and in lot of functions, that can confuse new users without knowledge of application.*

Keywords—User Experience, non-intrusive, chat application, user-friendly

# Extended Abstract

## Problem definition

There is such big problem with toady’s chat applications, because they force yourself to spend there a lot of time by controlling your subconscious. They are doing it by using notifications, which are stimulating your sight, hearing and sometimes touch senses. Also, they are forcing you by ‘unread message’ alerts and/or with ‘seen’ info when you open it. They need to do this because of their profit [1].

It’s a big problem, because “They don’t only change, what we do, they change, what we are. People texts or do emails during corporate board meetings.” [2]. It’s because all this intrusive behaviour of this applications. We are “alone together”.

Another problem is with user-unfriendly layout at some applications. For example, you can’t list online users, or separate group chats and private chats, which could be little bit chaotic.

About all these animated emojis, gifs, stickers, etc. They are a way, how to take more attention from us. When you are searching in the almost infinite lists of them and searching for the right one, it takes a lot of time especially for the user that doesn’t know them.

## Solving the problems

To solve these problems from previous section I decided to do some radical changes to the chat applications as we know them now. First, I decided to don’t disturb offline users with notifications. Lot of applications are disturbing offline users to grab their attention and it has negative effects [3].

To solve problem with user-unfriendly layout, I mentioned before, I decided to do three separated groups, which are clearer and more user-friendly [4]. (more in the next section)

## Presentation of prototype

The goal of this project was creating non-intrusive chat application that will be also user-friendly but without unnecessary functions. Application includes:

* Sending and receiving private/group messages in real time
* Storing messages which can be loaded through a ‘Load more’ button
* Messages are timestamped
* List of currently active users which is updated in real time
* List of all users
* List of groups that user is in
* Groups with access only for users that are already in
* Ability to invite others to the group or kick them
* Ability to create new group
* Profile pictures
* Login/Register forms
* Non-intrusive notifications for new message

User-friendly layout

The layout is user-friendly because I separated online users, all users and all accessible groups, which solves problem I mentioned before. You can easily switch between them in dropdown menu and choose demanded one.

Profile pictures

I implemented profile pictures because they are better to recognise users in group chats better by the profile picture than by name. Also, you are remembering user on online chats by their profile picture, not by name [5][6].

Non-intrusive notifications for new message

Because goal of this project is to do non-intrusive chat application, I needed to think about notifications a lot. When is user offline, he is not receiving any notifications as I spoke about it before, but the thick part was what should happen, when is user online? I decided to implement decent notification in form of changing title of tab and highlighting the user or group, where is new message.

What about ‘unread message’ trouble? You can easily open it and ignore it afterward. The highlight from new message will disappear as well as changing title of tab and the other user will have no idea about that you already opened it.

## Brief statement about implementation

The backend of application was implemented in ASP.NET [7] with SignalR [8]. For the frontend I used JavaScript with jQuery [9] and Bootstrap framework. As a database I chose MSSQL.

The logged user is stored in session. If you are not logged in, you can’t enter to the chat. After login or registration, you are forwarded to the chat page, where is always opened ‘Global’ chat, where is every user, and ‘online users’ list.

## Evaluation metodology

I evaluated results by user testing. Ten peoples were randomly chosen from my closest friends and random strangers. After half hour of testing I asked them for few questions. Result was interesting. Eight of them liked the switching between lists of groups and peoples. But only two of them liked chat application without notification, however for another 5 peoples were notification about new message in the tab enough. “Less notifications – more productivity”, said one of them. On the other side, nine of them didn’t realized that they are spending so much time on the chat applications and/or online. All ten peoples were missing emojis, because they got used to them.

## Conclusion

Non-intrusive chat application has good potential to help people to not be so addicted on the instant messaging applications and focus more to the work and personal grow. On the other side, as was mentioned before, a lot of people don’t realize that all these notifications are consuming a lot of time and it’s why the non-intrusive chat application can’t be never successful, because the most important thing on the chat applications is the users count. Sadly, application like this, will never have a lot of users until the peoples don’t get it.

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