

Bot Web – RoboChat

Let's be a big family

BotGirls – 16-0375

1st author: *Christina Grasl*

Bot-Girls - (16-0375)

Vienna, Austria

cgrasl@student.tgm.ac.at

2nd author: *Manuela Gross*

Bot-Girls - (16-0375)

Vienna, Austria

mgross@student.tgm.ac.at

Bot-ball plays already a big role at the TGM. The big question is: can we somehow improve the organization of bot-ball? At first we're going to tell you about our general ideas of improving the process and the organization throughout the whole year. Furthermore we have some recommendations how to make bot-ball more popular and to animate people to inform themselves about it. concluding we are going to talk about the improvement in our on school, like the opportunity to take part in some workshops for volunteers (which could be fee-based) and the chance to get to know the other teams a little bit better

I. INTRODUCTION (*HEADING 1*)

This paper will try to explain some ideas and the possible realization for future Bot-Ball. Of course there are some thoughts that have some contras and could be quite difficult to realize. However, they will still be explained in the paper. The team perhaps has some more ideas for the general implementation of events and meeting points for throughout the year. Other than that it would be really helpful to have a website about some more detailed information about Bot-Ball, the tournament and a possibility to have contact with the other team members.

II. CONCEPT/DESIGN

One of the main ideas is an additional workshop for the people who are beginners and are new to the robot scene. A lot of people have to learn everything right from the start, so a workshop for those people would help them a lot. There could be a workshop where only the people who really want/have to learn all the basics. Also it would be great to have a workshop for the more interested and experienced participants, so they could learn a lot of more things about robotic and probably could show how talented they are.

There surely are a lot of people who would love to learn more about Bot-Ball, for those it would be quite interesting to get the chance to hear more. It may be possible to invite past winners (also from other countries) and organize a presentation held by

them. A drawback of this idea is that the team has to somehow find the money to finance the workshops. A potential option is to request a certain amount of money, starting from 30 participants, to cover the expenses.

Perhaps it could be managed to assign a group-/workshop-leader for each team, who helps and support his/her team and would be the contact person for the period of time in which the workshop is taking place. The teams should get familiar with everything quite early, that is why we would appreciate the workshops to be after the beginning of the school year, because at that point of time the learn costs are not that high. It would help a lot to get an in-depth introduction about Bot-Ball and "What is Bot-Ball?". Numerous of people are new to the topic area and a good, detailed explanation would make things a lot easier for them. On another day there could be a workshop where the mechanical part of robotic gets discussed, the pro and contra sides of robots, how to build a good "fork" or a good gripper, etc. Probably a few events and tournaments can be planned during the year.

II.I. WEBSITE

The team came up with the idea to create a website, because there are a lot of benefits seen in that.

The fundamental principle is the easy access to data related to the Bot-Ball tournament. Although there are some other plans.

There could be general group introductions, every group who joins the tournament records a video in which they introduce themselves. The goal we are striving with that is to get to know each other better (even before the tournament). A pretty interesting thing would also be to find out something about the schools the other teams attend, especially from the participants from other countries. We think that we should not see each other as rivals but rather as family, as a group of people who share the same interests. We ought to hold together.

Staying in contact with the other team members after the tournament seemed like a good idea to the team. That's why there should be added a chat-feature to the website.

An application which allows to chat with either the other teams, single team members or the Bot-Ball moderates.

More than that there was thought about some playful details like some robot emojis and some other robot details. Assuming that botball is mainly for teenagers and that the young people are ever so often on their mobile (and general on the internet) an app will be useful. It should only have some small, main methods. The app has to be easy to use and develop.

A user has only access to the application if he own the login-rights which everyone gets send per mail.

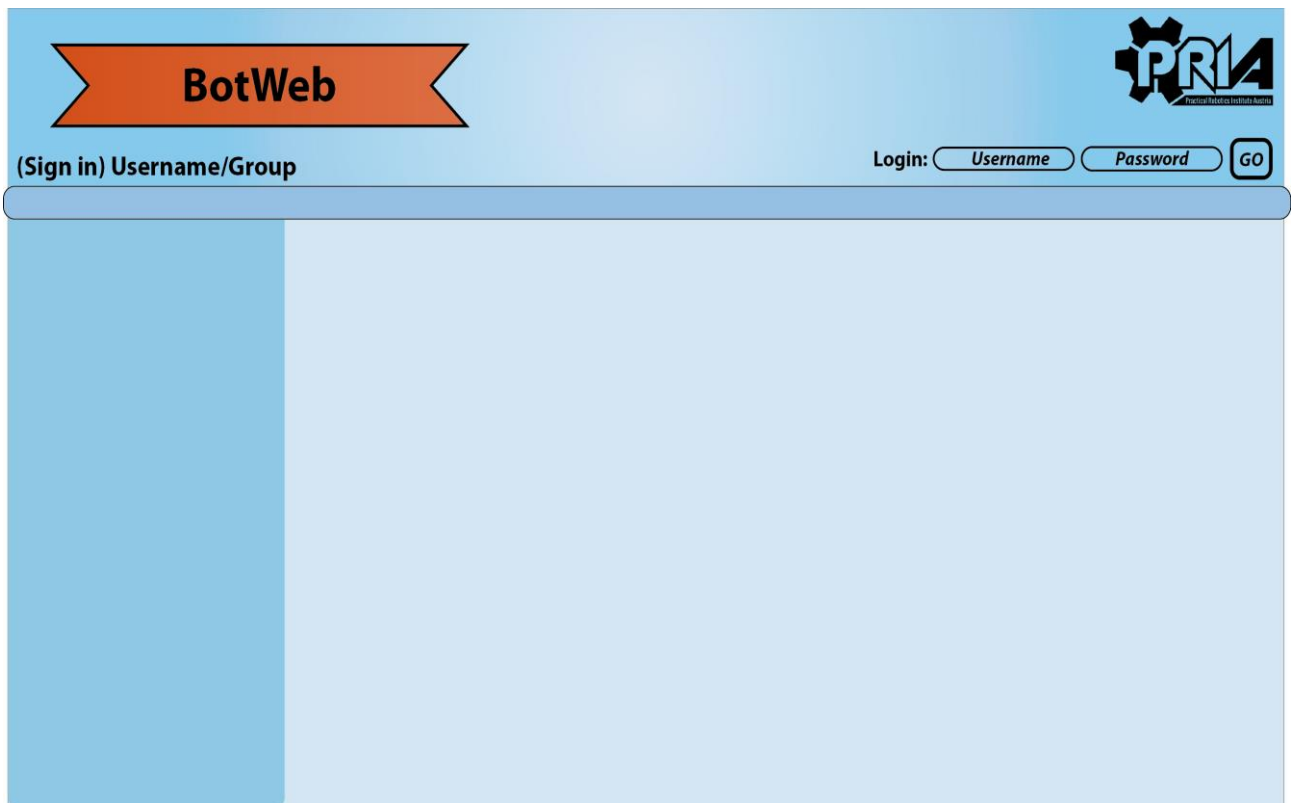
There should be also the option to share pictures. These shall be taken during the workshops, but can also be private photos (of course in conjunction with robotics). Sharing videos should also be possible. This is just a side project since the videos are for entertainment.

There should be a immediate contact between the team members and the Bot-Ball team. There should be access to the necessary data & emails just by one click on a window.

The most important part of the website is the access to the PDF's and the documents. Potentially there could be some introductory videos considering that someone wants to practice at home.

We want to strengthen the „Bot-Ball-Family“. The contact between each other is really important for us.

That is an example of how the website could look like. We want a simple and pretty design and an easy handling. The homepage-name is just a proposal. We thought that Bot-Web is pretty appropriate.



II. II. GENERAL

On the top right you can see the Pria-logo. Underneath that there is put the Login area in which

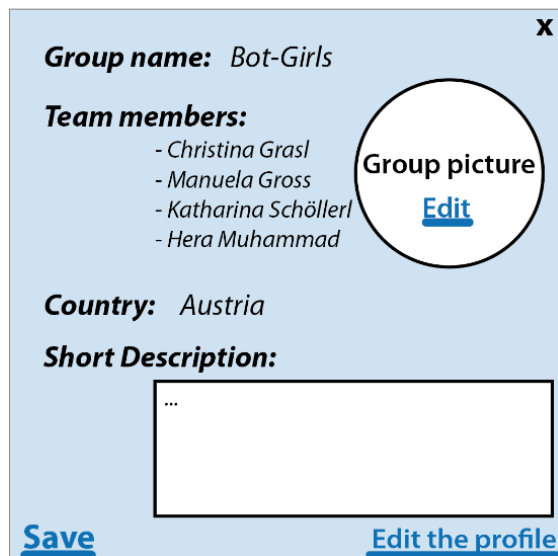
you can sign in with the username and password.

After the first time logging in the password can be changed. The button next to the

username and password is for the login-confirmation.

By clicking on it the username and the team-name will appear on the left side (under the website-name).

If the username is clicked, the group-menu will show up:



The screenshot shows a light blue form titled 'Group name: Bot-Girls' with a close button 'X' in the top right. Under 'Team members:', there is a list: '- Christina Grasl', '- Manuela Gross', '- Katharina Schöllner', and '- Hera Muhammad'. To the right is a circular 'Group picture' placeholder with an 'Edit' link below it. The 'Country:' field is set to 'Austria'. The 'Short Description:' field contains '...' and is followed by a large empty text box. At the bottom, there are two buttons: 'Save' on the left and 'Edit the profile' on the right.

This is the group-menu

II. III. GROUP-MENU

In the group-menu the most important information about a team is listed and managed. It exists to see what the other teams can see from your group. The fields are no obligation which means there has not to be a group picture, even though it would be nice. If someone want to edit the profile he have to click on "Edit the profile", there it can be changed. When you are done you have to click on the save-button.

The field only shows up on the main page. That means if someone clicks "X" in the upper corner he will be send back on the main page.

This is an easy design, everyone can easily use this, but there will be a 'Help'-Button in the main menu, there can be read a little text about the website and the use of the website.

II. IV. THE CHAT

Another concept that we thought about was to add a Chat. In this century everything works with communication (via the internet). We are extremely interested in the contact between the groups, since there will be a lot of people from all around the world

it is a good chance to get to know the other ones before the tournament.

This chat is called RoboChat, this is a name which describes it in a good way.

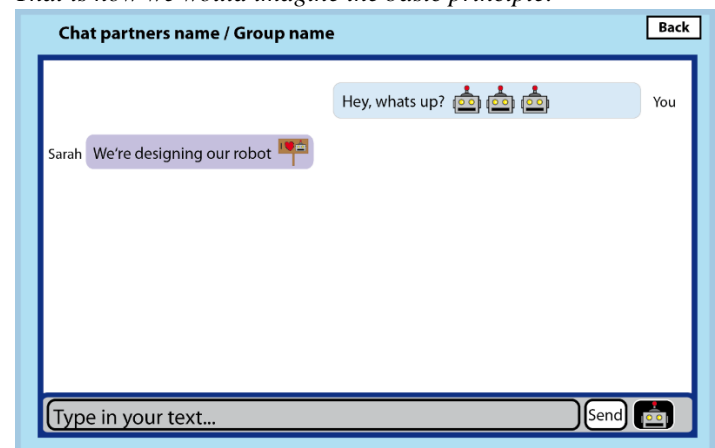
There is an option to chat as a whole group (with another group) or a single person with another one. When you click on the name of your desired chat partner (in the group chat) you immediately get to the group-site of the chat-partner you just clicked on. That is all the information you can get about a single person.

This allows all to have also contact after the tournament and that has the highest priority for our team. We want to begin and end the tournament as a family.

By the use of this chat there can be communicated and established contacts in advance. The Chat has a really simple principle. It is built up easily and has not got a lot of features.

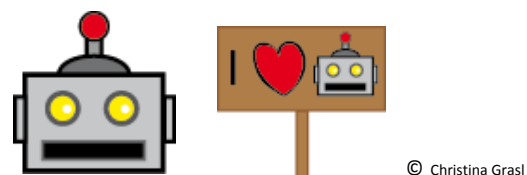
We also added the possibility to use and send emojis, which of course have to do something with robots.

That is how we would imagine the basic principle:



The screenshot shows a chat window titled 'Chat partners name / Group name' with a 'Back' button in the top right. The chat area contains two messages: 'Hey, whats up?' with three robot emojis and 'You', and 'Sarah We're designing our robot' with a robot emoji. At the bottom, there is a text input field 'Type in your text...', a 'Send' button, and a robot emoji icon.

Here are two of the emoji-designs:



Additionally it would be great to get in touch with a Pria employee in an easy way, like one single click on the main-screen. You can as well start a chat with a Pria employee.

Finally there is a feature which allows the groups to upload pictures. We would like that in order to have a look at the other people's life and lifestyle, to see the people behind the robots. The maximum video-duration is 5 minutes.

Maybe there are some Bot-Ball participants which would contribute themselves to the project (for example: the designs of the emojis). There are some down sides when it comes to the realization of our idea, but we think that with the cooperation of the others we can manage to do it.

II. V. PICTURES

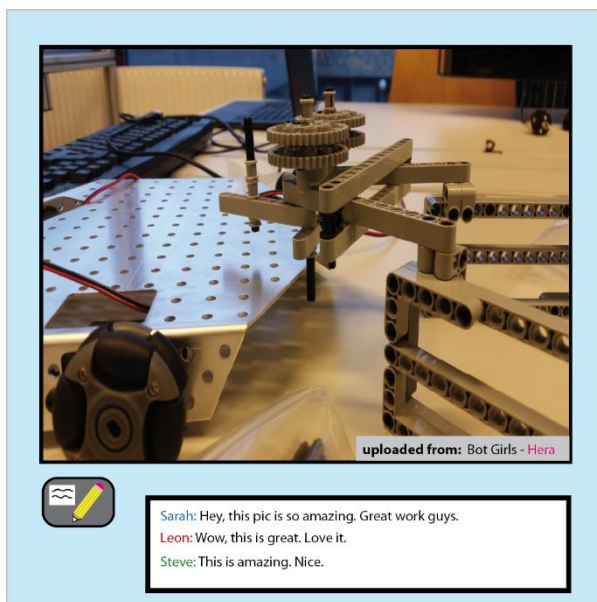
There should be a function to upload pictures. Of course, this pictures should be pictures about robotic.

With this function, the pictures from the users will be uploaded on the main page of the website, so everybody can see them. The other users can post comments to this pictures. The comments get checked, and if the comments disobey the guidelines it gets deleted.

There will be a big button with a little pencil, when a user clicks it, a comment can be written. Everyone can see who uploaded this picture, and in with team this person is.

There will be no like and dislike button, because every picture is beautiful and great. If any user sees a picture that disobey the guidelines, the user can report this picture by sending an e-mail to the botball-team.

The team thinks that the picture upload function would be great, it would be very personal and it would give the other teams a little view in the life of their opponents.

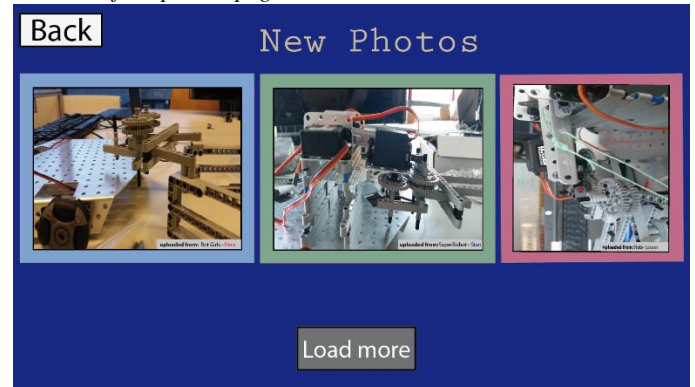


On the main webpage, a user can click onto a symbol which can get him to the page on which all picture will be uploaded.

At first there will be seen the pictures which are recently uploaded. When the 'load more' button is clicked, the page will load a few other pictures.

There will be a white big button with the name 'back'. This button takes a user directly back to the main page.

The idea of the picture page:



III. TOURNAMENTS

There should be some more little tournaments during the year, it will be great to have a little competition only for the school-students. So they can have some fun till the real, big tournament gets started.

Probably there can be a tournament only for the girls, maybe this will bring more girls to BotBall. There could also be a boy tournament.

Of course there are some small prizes for the first three teams, this prices can be supported through the sponsors. So probably you can win a little workshop to learn more about robots.

Maybe there can be a camp during the summer, in this camp all teenagers and kids are welcome. So BotBall can be published in the world.

Not only technical schools want to work with robots, there a few more people who are interested in this. So these camps will be very useful for them. In the camp you can make new friends and at the end of the camp, there is a big tournament with big prizes.

Of course, this camp isn't for free.

IV. CONCLUSION

The conclusion is that we in generally speaking want to distribute Bot-Ball a little more on our school.

We want to manage that with the help of tournaments in veach department and department vs department. We want to organize a yearly TGM-tournament.

Furthermore we want to add the workshops for beginning and advanced people which would hopefully affect the performance at the tournament in a positive way. However, we think our main idea – the website – is going to have the most positive effects. There can be a lot more added to the website, but the things listed above were the most important for us.

V. ACKNOWLEDGMENT

The whole team wanted to thank all of the persons which supported us and helped us when we had some problems.