Artifact 4

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Our team prepared 15 user stories, elaborated on each of it and tried to measure them in terms of INVEST approach to have a better idea of how the goals of our project could be achieved successfully.

## Backlog

1. Students usually want to keep updated on their PE course progress, so the functional to see personal statistics is very essential for the project
2. To be a really helpful tool, administrators should have an ability to spread the students among groups in a manner that both respects expectations of students and capabilities of trainers
3. Comfortable usage of the project implies that each student has a choice of classes to participate in. So the functional to choose a class is required
4. Students have to be sure that sports classes will be exactly on time as in the schedule. Students have a "Schedule" button on their menu. This shows the sports classes timetable as a .png file
5. One of the most used functions might be to export information to excel files. So as an admin has a lot of work to do, the interface should be comfortable and easy to use.
6. If the system must contain actual information, recording the data into the system must be easy and comfortable so that trainers could easily and quickly put the hours to the students and start other things to do
7. In webpage, mobile app a student will get a notification before every training for which he/she is assigned. Also, a student can change at what time notifications will come
8. The student will have a form with all sports clubs available for his health group. And he/she can choose a group with just one click. After that student must push the save button to update student information in the database
9. Admin will have the ability to change student information, especially health groups. Firstly Admin has a list of all students. He/she clicks on one student profile after that there will be a picker with all health groups. Admin chooses one group, click save button and information automatically updated in the database
10. Admin is able to register trainers in a special type of account, so they have an ability to mark the attendance of students. For trainers who do not have Innopolis University email, an admin needs to give a special login and password
11. If a student has sent a request to change the group or if some group has too many students, the admin has an ability to put students from one group to another
12. Admin is able to create a schedule for trainers, which will be viewed as a table in every trainer account.
13. A student has a page where they can see general statistics of all groups like the number of empty seats
14. Admin is able to manage medical references of students. Students available sports classes will be automatically changed
15. Trainers have a “schedule” button on their menu. This schedule presented as .png file

## INVEST table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | User story description | **I** | **N** | **V** | **E** | **S** | **T** |
| 1 | As a student I want to see my actual statistics (hours/classes) | 2 | 2 | M | 2 | 2 (3) | 3 |
| 2 | As an admin I want to easily distribute students into groups among sport classes | 1 | 3 | S | 1 | 2 (2) | 1 |
| 3 | As a student, I want to choose sport classes | 2 | 2 | M | 3 | 3 (3) | 3 |
| 4 | As a student I want to see actual schedule so that classes were in assigned time as in schedule | 1 | 3 | M | 2 | 1 (1) | 3 |
| 5 | As an admin I want to easily export all stats to moodle so that there were not a lot of buttons | 3 | 2 | M | 2 | 2 (2) | 3 |
| 6 | As a trainer I want to easily mark attendance (hours) of students so that they could see actual info any time | 2 | 2 | M | 1 | 1 (1) | 3 |
| 7 | As a student I want to get notifications of upcoming sport classes | 3 | 3 | W | 3 | 2 (2) | 3 |
| 8 | As a student I want to easily change sport group so that it will be convenient to take new class | 3 | 3 | M | 2 | 1 (2) | 3 |
| 9 | As an admin I want to put student group of health so that students could choose proper classes | 2 | 3 | M | 2 | 2 (2) | 2 |
| 10 | As an admin I want to register trainers so that they will have ability to mark student attendance | 3 | 2 | M | 3 | 3 (3) | 3 |
| 11 | As an admin I want to easily and quickly change Students group so that students could attend classes immediately | 2 | 3 | S | 2 | 2 (2) | 3 |
| 12 | As an admin I want to create a schedule for each trainer | 2 | 3 | M | 3 | 1 (1) | 1 |
| 13 | As I student I want to see the other groups # of empty sets and schedule so I know what to expect when decide to join them | 2 | 3 | M | 3 | 3 (3) | 3 |
| 14 | As an admin I want to manage medical references of students and student available sport class will be automatically changed | 3 | 3 | C | 2 | 2 (1) | 2 |
| 15 | As a trainer I want to see my schedule so that I can plan my activities | 1 | 3 | C | 3 | 3 (3) | 3 |

## INVEST reasoning

### User story #1 (As a student I want to see my actual statistics)

**I**ndependent 2 - Statistics is loosely coupled with user story #6 (As a trainer I want to easily mark attendance (hours) of students so that they could see actual info any time)

**N**egotiable 2 - It is a user wish to have statistics for students

**V**aluable M - Essential feature of the project, must be implemented

**E**stimable 2 - The team can estimate this user story easily since the feature is quite common and well-known

**S**ize 2 (3) - It is small enough, but can be split up as a feature

**T**estable 3 - Can be tested easily, have very clear acceptance criteria (can a student view his statistics or not)

### User story #3 (As a student I want to choose sport classes)

**I**ndependent - 2 - User story loosely coupled with the story 8 user story (As a student I want to easily change sport group so that it will be convenient to take a new class)

**N**egotiable - 2 - We need more details to implement this feature. For instance, it is not stated are there any limitations on students choices.

**V**aluable - M - It is a very important feature, which is principal to implement.

**E**stimatable - 3 It is not hard to estimate feature described in the user story

**S**ize - 3(3) - It has appropriate small enough size

**T**estable - 2 - It is clear to test it, also acceptance criteria is clear: it is either works or not.

### User story #4 (As a student I want to see actual schedule)

**I**ndependent 1 - It fully depends on admin distribution of students among sports classes and choice of the students, if they want to join to some other classes

**N**egotiable 3 - Actually we are free on this, but it would be great if it is very comfortable for the students and we could ask them for some advice

**V**aluable M - of course, this is the one of the most important features that must be implemented

**E**stimable 2 - As most of us in the team did not know how to implement it correctly from the first try, we guess it needs some prototype

**S**ize 1 (1) - There is no need to split it to several parts and it is well defined functional

Testable 3 - It has obvious acceptance criteria: click the button, show the actual schedule

### User story #10 (As an admin I want to register trainers)

**I**ndependent 3 - Registration of trainers is fully independent

**N**egotiable 2 - We need more details from stakeholder: what to do with paid trainers who do not have Innopolis email, and how to deal with students who are leaders of clubs and can also mark attendance, but in general implementation we are free

**V**aluable M - This is the primary feature, which must be implemented

**E**stimable 3 - Easy to estimate

**S**ize 3 - The process of registration itself is easy

**T**estable 3 - Easy to test. If after registering a new account was created, then the registration was done successfully

### User story #15 (As a trainer I want to see my schedule so that I can plan my activities)

**I**ndependent 1 - Fully dependant on 12th

**N**egotiable 3 - We can freedom to choose the implementation

**V**aluable “C” - Not completely necessary, because trainers can check the schedule in the google doc

**E**stimable 3 - Simple task, so it is easy to estimate

**S**ize (state) 3 (3) - Discrete and simple task

**T**estable 3 - Clear and discrete. Also, acceptance criteria is clear: it either works or not.