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. **( 20 s.p.)** As a student I want to register via Innopolis email, so that my account will be connected to moodle
2. **( 20 s.p.)** As an admin I want to register trainers, so that they will have ability to mark student attendance
3. **( 40 s.p.)** As a student, I want to choose sport classes, so that I will be able to visit chosen classes and get hours for them
4. **( 100 s.p.)** As an admin I want to easily distribute students into groups among sport classes, so that it will be convenient for both students and trainers
5. **( 40 s.p.)** As a student I want to easily change sport group, so that it will be convenient to take new class
6. **( 13 s.p.)** As an admin I want to easily and quickly change Students group, so that students could attend classes immediately
7. **( 13 s.p.)** As a student I want to see actual schedule, so that classes were in assigned time as in schedule
8. **( 13 s.p.)** As an admin I want to create a schedule for each trainer, so that it will be viewed as a table in every trainer account
9. **( 13 s.p.)** As a trainer I want to see my schedule, so that I can plan my time
10. **( 8 s.p.)** As a student I want to see the number of empty places in other groups and their schedule so that I know what to expect when decide to join them
11. **( 5 s.p.)** As an admin I want to put student group of health, so that students could choose proper classes
12. **( 40 s.p.)** As a trainer I want to easily mark attendance (hours) of students, so that they could see actual info any time
13. **( 20 s.p.)** As a student I want to view my actual statistics, so that I can see how much hours I have for some period of time
14. **( ? s.p.)** As an admin I want to easily collect all statistics, so that it will be possible then to export it in moodle or excel

Invest criteria

|  |  |
| --- | --- |
| Independent | 1 - fully independent of other user stories  0 - dependent on other user stories |
| Negotiable | 2 - client provided clear requirements  1 - client provides some requirement, but they are not enough or not clear  0 - client do not provide any clear requirements |
| Valuable | 2 - it is very important to create this user story  1 - the customer will be glad if we implement this user story  0 - this feature not essential. We can forget about it |
| Estimable | 2 - easy to estimate  1 - needed a prototype  0 - hard to estimate |
| Size appropriate | 2 - appropriate size (2 small enough - functional)  1 - split one step (1 - not fits sprint - feature)  0 - split 2 steps (0 - closer to release - epic) |
| Testable | 2 - user story has clear AC and easy to test  1 - user story has clear AC, but need a relatively big amount of time to test (greater than 1 year)  0 - user story does not have AC and not clear how to test it |

## INVEST table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | User story description | **I** | **N** | **V** | **E** | **S** | **T** |
| 1 | As a student I want to see my actual statistics (hours/classes) | 0 | 1 | 2 | 2 | 2 (3) | 2 |
| 2 | As an admin I want to easily distribute students into groups among sport classes | 0 | 2 | 1 | 1 | 2 (2) | 0 |
| 3 | As a student, I want to choose sport classes | 0 | 1 | 2 | 3 | 3 (3) | 2 |
| 4 | As a student I want to see actual schedule so that classes were in assigned time as in schedule | 0 | 2 | 2 | 2 | 1 (1) | 2 |
| 5 | As an admin I want to easily export all stats to moodle so that there were not a lot of buttons | 1 | 1 | 2 | 2 | 2 (2) | 2 |
| 6 | As a trainer I want to easily mark attendance (hours) of students so that they could see actual info any time | 0 | 1 | 2 | 1 | 1 (1) | 2 |
| 7 | As a student I want to get notifications of upcoming sport classes | 1 | 2 | 0 | 3 | 2 (2) | 2 |
| 8 | As a student I want to easily change sport group so that it will be convenient to take new class | 1 | 2 | 2 | 2 | 1 (2) | 2 |
| 9 | As an admin I want to put student group of health so that students could choose proper classes | 0 | 2 | 2 | 2 | 2 (2) | 1 |
| 10 | As an admin I want to register trainers so that they will have ability to mark student attendance | 1 | 1 | 2 | 3 | 3 (3) | 2 |
| 11 | As an admin I want to easily and quickly change Students group so that students could attend classes immediately | 0 | 2 | 1 | 2 | 2 (2) | 2 |
| 12 | As an admin I want to create a schedule for each trainer | 0 | 2 | 2 | 3 | 1 (1) | 0 |
| 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 | 0 | 2 | 2 | 3 | 3 (3) | 2 |
| 14 | As an admin I want to manage medical references of students and student available sport class will be automatically changed | 1 | 2 | 0 | 2 | 2 (1) | 1 |
| 15 | As a trainer I want to see my schedule so that I can plan my activities | 0 | 2 | 0 | 3 | 3 (3) | 2 |

## 

## INVEST reasoning

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

**I**ndependent 0 - 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 1 - It is a user wish to have statistics for students

**V**aluable 2 - 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 2 - 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 - 0 - 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 - 1 - We need more details to implement this feature. For instance, it is not stated are there any limitations on students choices.

**V**aluable - 2 - 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 - 1 - 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 0 - 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 2 - 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 2 - 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 2 - 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 1 - Registration of trainers is fully independent

**N**egotiable 1 - 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 2 - 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 2 - 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 0 - Fully dependant on 12th

**N**egotiable 2 - We can freedom to choose the implementation

**V**aluable 0 - 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 2 - Clear and discrete. Also, acceptance criteria is clear: it either works or not.

## Mind Map

We can measure our goal by the usage frequency of our functionalities