



POLITECNICO DI MILANO
Computer Science and Engineering

Acceptance Test Deliverable

CodeKataBattle

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1. Introduction

1.1 Purpose

This document is the Acceptance Testing Deliverable of the project CodeKataBattle. Its purpose is to test the platform of another group, pointing out eventual bugs or inconsistencies between the solution presented and the RASD and DD.

1.2 Project analyzed

The project analyzed is the one developed by Nicolò Giallongo, Giovanni Orciuolo and Giuseppe Vitello. Their implementation and all the previous documentation can be found in their repository on Github: <https://github.com/codekatabattle-polimi/OrciuoloVitelloGiallongo> (actually it is private).

1.3 Acronyms

EBD: enrollment battle deadline

FBD: final battle deadline

CD: current date

CDT: current date time

ETD: enrollment tournament deadline

MNS: maximum number subscriber

OTC: original tournament creator

TC: tournament coordinator

FTD: final tournament deadline

MAE: mandatory automated evaluation

OME: optional manual evaluation

SAT: static analysis tools

DAS: Directly Accepted Student: a Student U is directly accepted in a Tournament T if T is public or T is friends only and U is a friend of the OTC of T.

2. Installation Instruction

We followed the instructions written in the ITD file and some minor bugs were revealed.

In particular the commands `./mvnw install` and `./mvnw spring-boot:run` cannot be run because the file is not an executable, the fix is very easy to make: the file `mvnw` has been made executable.

Moreover it is necessary to use a personal access token and set it as an environment variable called `CKB_GITHUB_PAT`, but this requirement is only written in the README.md in the "codekatabattle" directory.

3. Acceptance Test Cases

In this chapter we focused on the requirements implemented by the system and tested them. After asking for the other team's personal access token, we run all the tests present in the source code, all the tests passed.

Following the automated tests, we proceed to manually test the application to test for the implementation of the requirements and to verify if the system works correctly under the scenarios present in the RASD

3.1 Requirements test cases

This paragraph contains all the test cases extracted from the implemented requirements, the requirements labeled SR3, OR10, OR11, OR16, OR17 could not be tested because, as per testing of SR4 it is impossible for students to join a battle and create a team

ID	SR4
Description	The System allows Students to join in a Battle from its Tournament, if EBD is not expired and there are available spots.
Precondition	A battle is already created
Input	<ul style="list-style-type: none">• Navigate in the tournament in which the battle was created• Select the battle• Click the button join
Expected output	The user joins the battle
Test result	Failed (step 3) <ul style="list-style-type: none">• When the join button is clicked, the user is prompted to a internal server error page, the server side display a log containing the following: "Battle has not started yet, it is not possible to join"

ID	SR7 (only website)
Description	The System allows Students to join a Tournament if the CD is before the ETD, and the MNS isn't reached: <ul style="list-style-type: none">• via website (by searching it or finding it on a user profile). In this case the user is accepted only if DAS;
Precondition	A tournament was already created
Input	<ul style="list-style-type: none">• Navigate in the tournament's list• Select the tournament in which I am interested• Click the "Join" button
Expected output	The user has joined the tournament
Test result	Success

ID	SR11
Description	The System allows a Student to see the following information about a tournament in which they are subscribed: participants, ongoing battles and their leaderboard, TCs, ETD and FTD.
Precondition	A tournament was already created
Input	<ul style="list-style-type: none"> • Select the upper left button • Select all tournaments • Select the tournament in which I am interested • The page displays the information
Expected output	The page displays: participants, ongoing battles and their leaderboard, TCs, ETD and FTD
Test result	Success (note: the ETD is visible only during the enrollment phase and the FTD is visible after the enrollment phase finishes)

ID	ER1
Description	The System allows an Educator to create a Tournament specifying the ETD, FTD and MNS.
Precondition	The user has logged in the application
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button "Create Tournaments" • Fill the labels with: <ul style="list-style-type: none"> ○ Tournament title: "Stack Tournament" ○ Max number of students: 4 ○ Description: "A tournament about stacks" ○ Enrollment Deadline: 13/02/2024 ○ Final Deadline: 20/02/2024 ○ Public: activated ○ None added as coordinator • Click on the submit button
Expected output	A tournament is created
Test result	Success

ID	ER2
Description	The System allows an Educator to modify ETD and FTD of a Tournament if they are the OCT for that Tournament.
Precondition	The user is in the tournament page
Input	<ul style="list-style-type: none"> • Click on the button with a pencil as image • Write in the “new” columns the new value of the attributes <ul style="list-style-type: none"> ○ Tournament title: “Queue Tournament” ○ Max number of students: 5 ○ Description: “A tournament about stacks” ○ Enrollment Deadline: 14/02/2024 ○ Final Deadline: 21/02/2024 ○ Public: nothing changed • Click on the “Edit” button
Expected output	The tournament is successfully modified
Test result	Success

ID	ER7
Description	The System allows an Educator to create Battles in their own Tournaments or in other Tournaments where they are the TC, if the maximum limit of contemporary Battles in the Tournament imposed by the System isn't reached.
Precondition	A Tournament was created and the user is the creator of the tournament or is a tournament coordinator. The user is already in the tournament page.
Input	<ul style="list-style-type: none"> • Select the “Battles” menu • Select the “+” symbol
Expected output	The website shows a form to compile
Test result	Success

ID	ER8
Description	Upon the creation of a Battle, The System allows an Educator to upload a kata to a battle belonging to their own tournament or to a tournament in which they are TC.
Precondition	The user is creating a battle
Input	<ul style="list-style-type: none"> • Insert the information about the battle: <ul style="list-style-type: none"> ○ Battle title: dp_battle ○ Timeliness base score: 10 ○ Description: "A battle based on dynamic programming" ○ Enrollment deadline: 10/02/2024 ○ Final deadline: 20/02/2024 ○ SAT: active ○ Manual evaluation: active ○ Selected language: python ○ Test: added a test case with <ul style="list-style-type: none"> ■ Test name: test1 ■ Test input: 1 ■ Expected output: 1 ■ Score given: 1 ■ private • Click submit button
Expected output	The battle is created
Test result	Success

ID	ER9
Description	Upon the creation of a Battle, The System allows Educators to set the EBD and FBD to their Battles, as well as the maximum and minimum number of students per team.
Precondition	The user is compiling the form of a battle
Input	<ul style="list-style-type: none"> • Insert the information about the EBD and FBD of the battle: <ul style="list-style-type: none"> ○ Enrollment deadline: 10/02/2024 ○ Final deadline: 20/02/2024
Expected output	The dates are accepted by the system and it is possible to set the maximum and minimum number of students per team
Test result	Partial success: <ul style="list-style-type: none"> • The dates are accepted but it is not possible for the user to input bounds for the number of students in the team as the fields are not present in the form

ID	ER10
Description	The System disallows an Educator to violate this condition: CD<=ETD<=EBD<FBD<=FTD.
Input	<ul style="list-style-type: none"> • Create a tournament with ETD 12/02/2024 and FTD 20/02/2024 • Create a battle with EBD 10/02/2024 and FBD 21/02/2024
Expected output	The battle is not created
Test result	Success

ID	ER12
Description	Upon the creation of a Battle, the System allows Educators to set additional configuration for scoring for that Battle.
Precondition	The user is creating a battle
Input	<ul style="list-style-type: none"> • Toggle the “manual evaluation” toggle button to make it active
Expected output	The battle is created with the possibility of the manual evaluation
Test result	Success

ID	ER15
Description	The System shows Tournament’s link to their OTC.
Precondition	The user is logged and has created a tournament
Input	<ul style="list-style-type: none"> • Select the upper left button • Select “My profile”
Expected output	The system has to show the tournament’s link to the OTC
Test result	Success

ID	ER17
Description	The System disallows an Educator that is OTC to ban a Student from their Tournament
Precondition	The user is the OTC of the tournament selected
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button “All tournaments” • Select the tournament
Expected output	The student is not banned
Test result	Success (note: there is no way to ban a student from a tournament)

ID	ER20
Description	The System allows an Educator to see the following information about a tournament in which they are OTC or TC: participants, ongoing battles and their rank, TC's, ETD and FTD
Precondition	A tournament has been created, the user is an OTC or a TC of the tournament and the user is in the page of the tournament.
Input	<ul style="list-style-type: none"> • Click on the Leaderboard label (it is possible to see the participants and the ranking) • Click on the Battles label (it is possible to see the ongoing battles) • Click on the Coordinators label (it is possible to see the coordinators) • Clicking next to the name of the tournament it is possible to see the ETD or the FTD
Expected output	It is possible to see all the information
Test result	Success (note: the ETD is visible only if the tournament is in the enrollment phase and the FTD is visible only if the enrollment phase is finished)

ID	ER22
Description	The System allows an Educator to modify the EBD and FBD of a battle they have created.
Precondition	The user has created a battle and the user is in the battle page
Input	<ul style="list-style-type: none"> • Select the upper right pencil icon • Insert the information about the new EBD and the new FBD
Expected output	The battle information are updated successfully
Test result	Success

ID	OR1
Description	The System creates a GitHub repository to be forked and used by the Users to push their code.
Precondition	A battle is created
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button “All tournaments” • Select the tournament • Click on the “Battles” label • Select the battle • Click on the link of the repository
Expected output	A repository is created and it is possible to visit it
Test result	Success

ID	OR2
Description	The System allows all Users subscribed to the platform to see the list of ongoing tournaments and the corresponding leaderboards.
Input	<ul style="list-style-type: none"> • Select the upper left button • Select “All tournaments” • Select a tournament • Click the leaderboard
Expected output	All the tournaments show up and after selecting a tournament and the leaderboard button, the leaderboard of the tournament is visible
Test result	Success

ID	OR8
Description	The System allows Users to create a profile on the platform only using their GitHub account.
Input	<ul style="list-style-type: none"> • The system shows the sign in page • Click on the sign in with Github • Select the account on Github • Log in via Github • The system shows the homepage
Expected output	The system shows the homepage of the CodeKataBattle application
Test result	Success

ID	OR9
Description	The System allows Users to login in their profile only via GitHub.
Input	<ul style="list-style-type: none"> • Access the website • The system shows the homepage
Expected output	The system shows the homepage of the CodeKataBattle application
Test result	Success

ID	OR14
Description	The System disallows OCT to set a MNS that exceeds the maximum value of MNS imposed by the system.
Precondition	The user is creating a tournament
Input	<ul style="list-style-type: none"> • Fill the labels with: <ul style="list-style-type: none"> ○ Tournament title: "Exceeding tournament" ○ Max number of students: 1.000.000.000.000 (1000 billions) ○ Description: "Exceeded" ○ Enrollment Deadline: 11/02/2024 ○ Final Deadline: 20/02/2024 ○ Public: activated ○ None added as coordinator
Expected output	The tournament is not created and an error is returned
Test result	Success

3.2 Acceptance test cases

Since in the ITD not all the requisites are listed, we decided to test the following scenarios and functional requirements extracted by the RASD.

Unfortunately the group has not developed the notification management and also the possibility to create teams during the enrollment phase of a battle.

ID	AT001_Login
Description	Login as a student or an educator
Input	<ul style="list-style-type: none">• The system shows the sign in page• Click on the sign in with Github• Select the account on Github• Log in via Github• The system shows the homepage
Expected output	The user has successfully logged in
Test result	Partial success: <ul style="list-style-type: none">• This is the only way for users to access the application, there is no sign up function• There is no way for the users to sign up, meaning that there is not distinction between students and educators

ID	AT002_Create_a_Tournament
Description	An educator wants to create a new tournament
Precondition	The user has logged in
Input	<ul style="list-style-type: none">• Click on the battle on the upper left button• Click on the button "Create Tournaments"• Fill the labels with:<ul style="list-style-type: none">○ Tournament title: "Stack Tournament"○ Max number of students: 4○ Description: "A tournament about stacks"○ Enrollment Deadline: 13/02/2024○ Final Deadline: 20/02/2024○ Public: activated○ None added as coordinator• Click on the submit button
Expected output	A tournament is created
Test result	Success

ID	AT003_Visualize_all_tournaments
Description	An user wants to visualize all the tournaments
Precondition	The user has logged in
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button “All tournaments”
Expected output	All the tournaments are visualized
Test result	Success

ID	AT004_Create_a_battle
Description	An educator that is OCT or TC of a tournament wants to create a new battle and has logged in
Precondition	The user is OCT or TC of a tournament an is in the tournament page
Input	<ul style="list-style-type: none"> • Select the “Battles” menu • Select the “+” symbol • Insert the information about the battle: <ul style="list-style-type: none"> ○ Battle title: dp_battle ○ Timeliness base score: 10 ○ Description: “A battle based on dynamic programming” ○ Enrollment deadline: 10/02/2024 ○ Final deadline: 20/02/2024 ○ SAT: active ○ Manual evaluation: active ○ Selected language: python ○ Test: added a test case with <ul style="list-style-type: none"> ■ Test name: test1 ■ Test input: 1 ■ Expected output: 1 ■ Score given: 1 ■ private • Click submit button
Expected output	The battle is created
Test result	Success

ID	AT005_Visualize_all_battles_in_tournament
Description	An user wants to visualize all the battles in a tournament
Precondition	The user has logged in
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button “All tournaments” • Select the tournament • Click on the “Battles” label
Expected output	All the tournaments are visualized
Test result	Success

ID	AT006_Join_a_tournament
Description	A student wants to join a tournament, the ETD is not finished and the numbers of participants has not reached the maximum
Precondition	The user has logged in
Input	<ul style="list-style-type: none"> • Click on the upper left button • Click the “All tournaments” label • Select the tournament • Click the “Join” button
Expected output	The student has joined the tournament
Test result	Success

ID	AT007_Join_a_battle
Description	A student wants to join a battle
Precondition	The user has logged in and has enrolled in the tournament
Input	<ul style="list-style-type: none"> • Click on the upper left button • Click the “All tournaments” label • Select the tournament • Click on the Battles label • Select the battle • Click the button join
Expected output	The student has joined the battle
Test result	<p>Failed (step 6)</p> <ul style="list-style-type: none"> • When the join button is clicked, the user is prompted to a internal server error page, the server side display a log containing the following: “Battle has not started yet, it is not possible to join” even if the battle is in the enrollment phase

ID	AT008_Visualize_ranking_tournament
Description	An user wants to visualize the ranking of a tournament
Precondition	The user has logged in
Input	<ul style="list-style-type: none"> • Click on the battle on the upper left button • Click on the button “All tournaments” • Select the tournament • Click on “Leaderboard” label
Expected output	The ranking is visualized
Test result	Success

ID	AT009_Modify_tournament
Description	An educator wants to modify a tournament
Precondition	The user has logged in, is the OTC and is in the tournament page
Input	<ul style="list-style-type: none"> • Click on the upper right button with a pencil as image • Write in the “new” columns the new value of the attributes <ul style="list-style-type: none"> ○ Tournament title: “Queue Tournament” ○ Max number of students: 5 ○ Description: “A tournament about queue” ○ Enrollment Deadline: 14/02/2024 ○ Final Deadline: 21/02/2024 ○ Public: nothing changed • Click on the “Edit” button
Expected output	The tournament is successfully modified
Test result	Success

ID	AT010_Modify_battle
Description	The creator of the battle wants to modify modify the EBD and FBD
Precondition	The user has created a battle and the user is in the battle page
Input	<ul style="list-style-type: none"> • Select the upper right pencil icon • Insert the information about the new EBD and the new FBD without violating time conditions (CD<=ETD<=EBD<FBD<=FTD)
Expected output	The dates are accepted by the system
Test result	Success

Since it is not possible to join a battle, it was not possible to test all the requirements about the points added to a student and the update of the leaderboards. Moreover it was also impossible to test the manual evaluation.

A big problem that we noted is that there is no clear distinction about whether an account belongs to a student or an educator, this means that any account could both create a tournament and join one.

4. Additional notes

The code is well written and very logically divided in sections, with all the services having their own interface.

The website is very aesthetically pleasing and makes a very nice user experience. It also allows the user to use their GitHub's profile to enter the application avoiding creating a new one for the purpose.

5. Effort spent

Tommaso Fellegara

Testing acceptance	6
Document writing	4

Manuela Marenghi

Testing acceptance	1
Document writing	2

Luca Cattani

Testing acceptance	2
Document writing	1