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Українська (uk) Увійти

SMART PL Erasmus+

На головну



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Для повноцінного доступу до цього сайту Вам потрібно створити обліковий запис.

Створити новий обліковий запис

Українська (uk)

Повідомлення про файли

International seminar “Developing an inclusive educational environment based on a student-centred approach in emergencies”

SMART online information and diagnostic platform for teachers and students

Prof. Sergii Lysenko

Khmelnytskyi National University, Ukraine



Co-funded by the
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of the European Union



Info

Moodle community

Contact Us

Ukraine, Khmelnytskyi, 112 Kamianetska st. I
Campus of Khmelnytskyi National University

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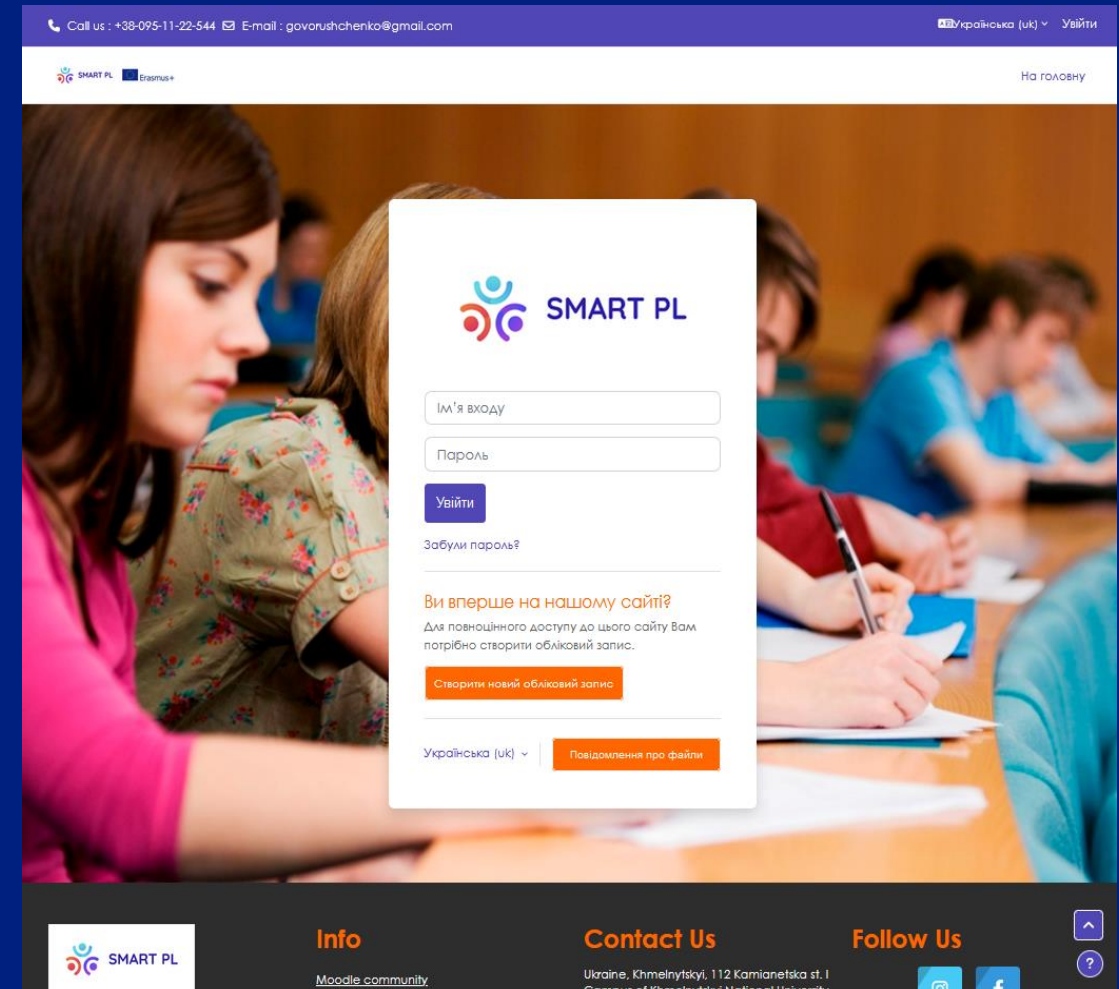
Assessments and tests





SMART-PL platform

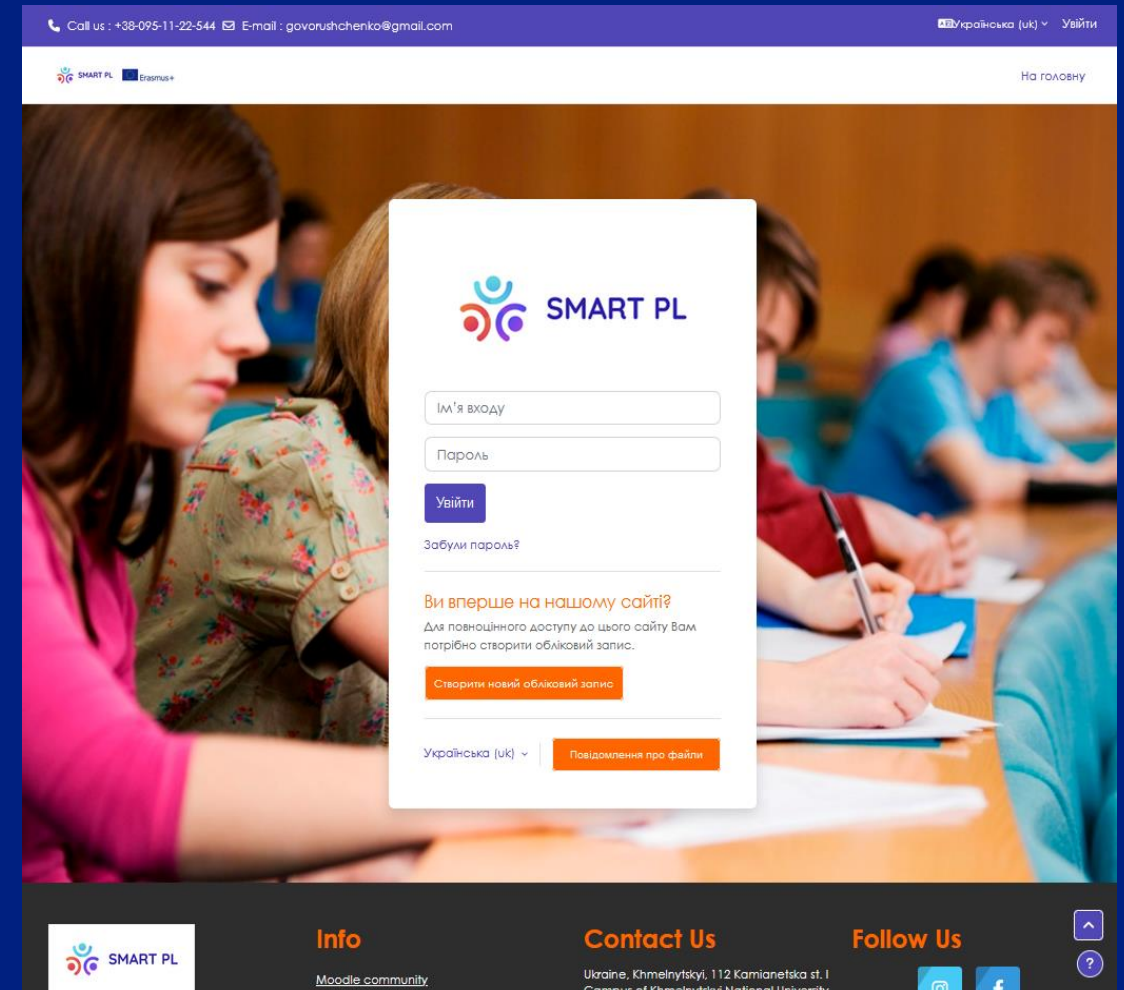
SMART-PL is a 3-year project, focused on introducing a model of personalised learning, based on the virtual learning environment of Intellectual Tutoring "Learning with No Limits".





SMART-PL objectives

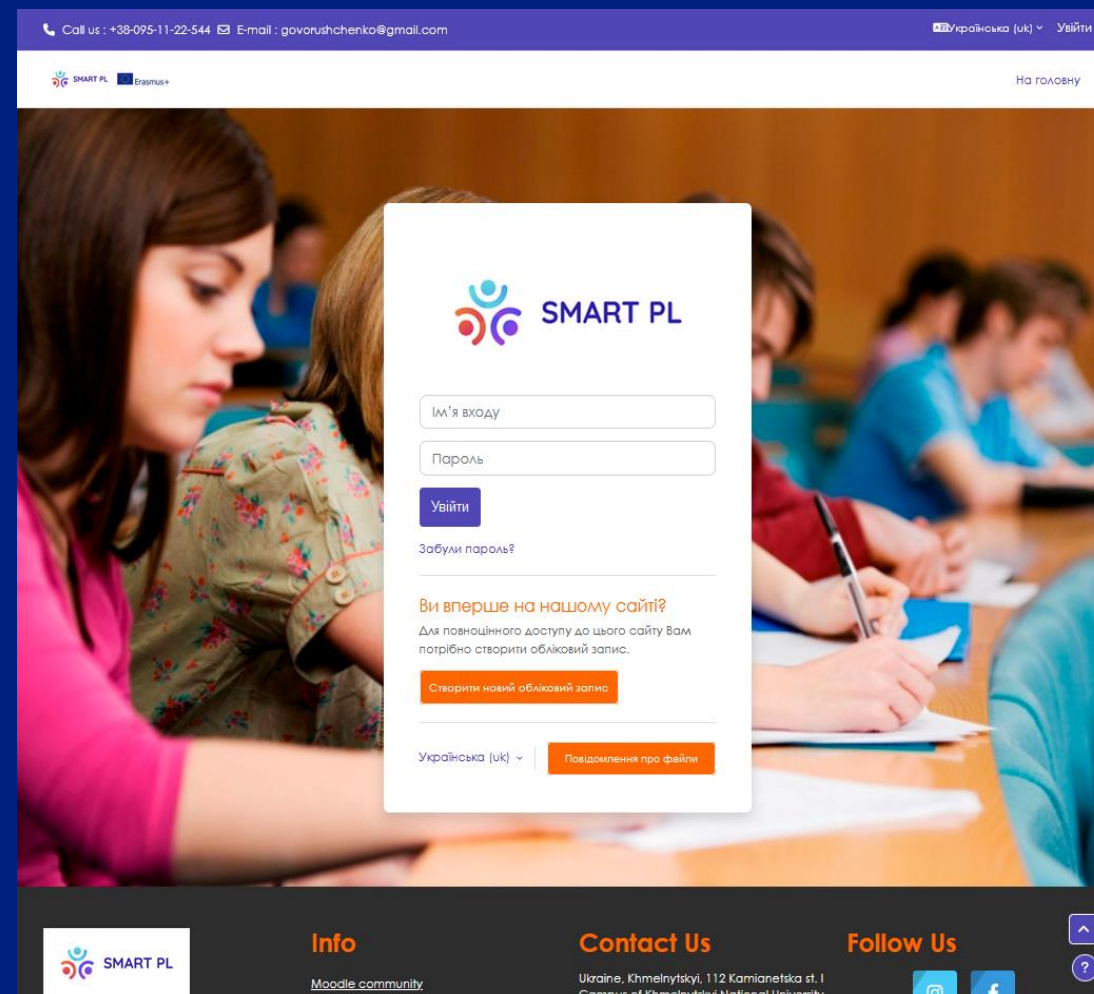
- ❑ Enhance students' motivation to learning through applying the by-the-learner approach and create conditions to meet students' individual needs associated with differentiation and personalization of academic trajectories.
- ❑ Increase transparency and comprehensibility of education and assessment for students (including the results of non-formal education), reducing students' anxiety as for their own professional expertise and forming their confidence to achieve efficient results.
- ❑ Create extra opportunities to get a higher education for people with disabilities and specific academic needs through inclusive education and the implemented model of personalized learning and hybrid technologies.





SMART-PL objectives

- ❑ Improve educational programs of universities by updating the process of formation of competencies and the distribution of program results of student learning between educational components; to improve the quality of teaching materials.
- ❑ Facilitate students' mobility, including in virtual mode, on a university/country scale, inter-university/country levels, between academic sectors and forms of education (formal/informal/correspondence) by acknowledging and swapping grades/credits.
- ❑ Ensure feedback on students', teachers and administration's efficiency.

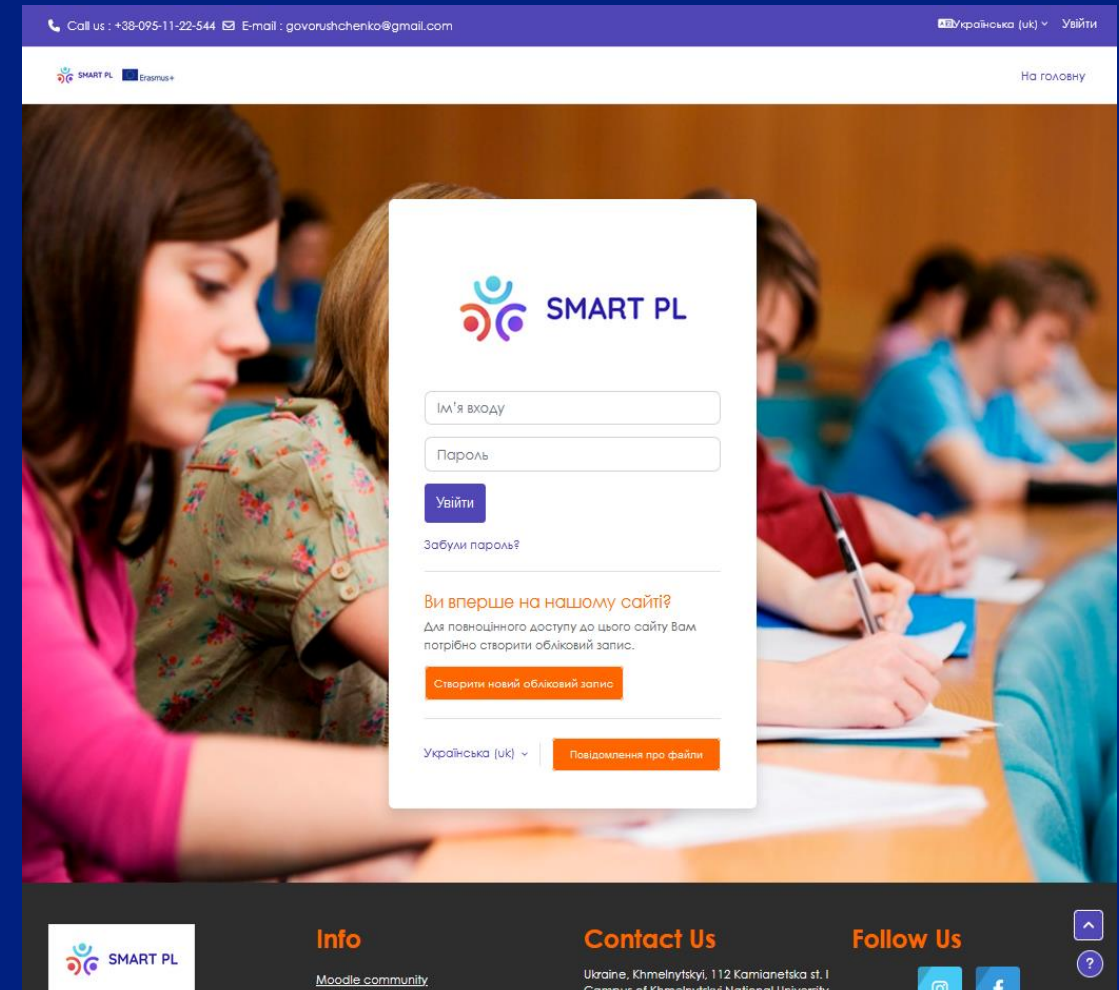




SMART-PL platform

Intellectual tutoring is a set of learning tools:

- ❑ **SMART online platform** for virtual personalised learning and formative student assessment;
- ❑ **co-working centre** with equipment for organising hybrid learning, which increases the educational process's efficiency and gives both teachers and students more opportunities.





Principle of the project



The fundamental principle of the project is a personalised approach aimed at forming a highly qualified competitive specialist who can conduct innovative activities and has the skills of continuous professional development.





Principle of the project



The **personalised approach** is characterised by innovative teaching methods, designed to encourage collaboration between students and teachers, emphasising the central role of students in controlling their learning.





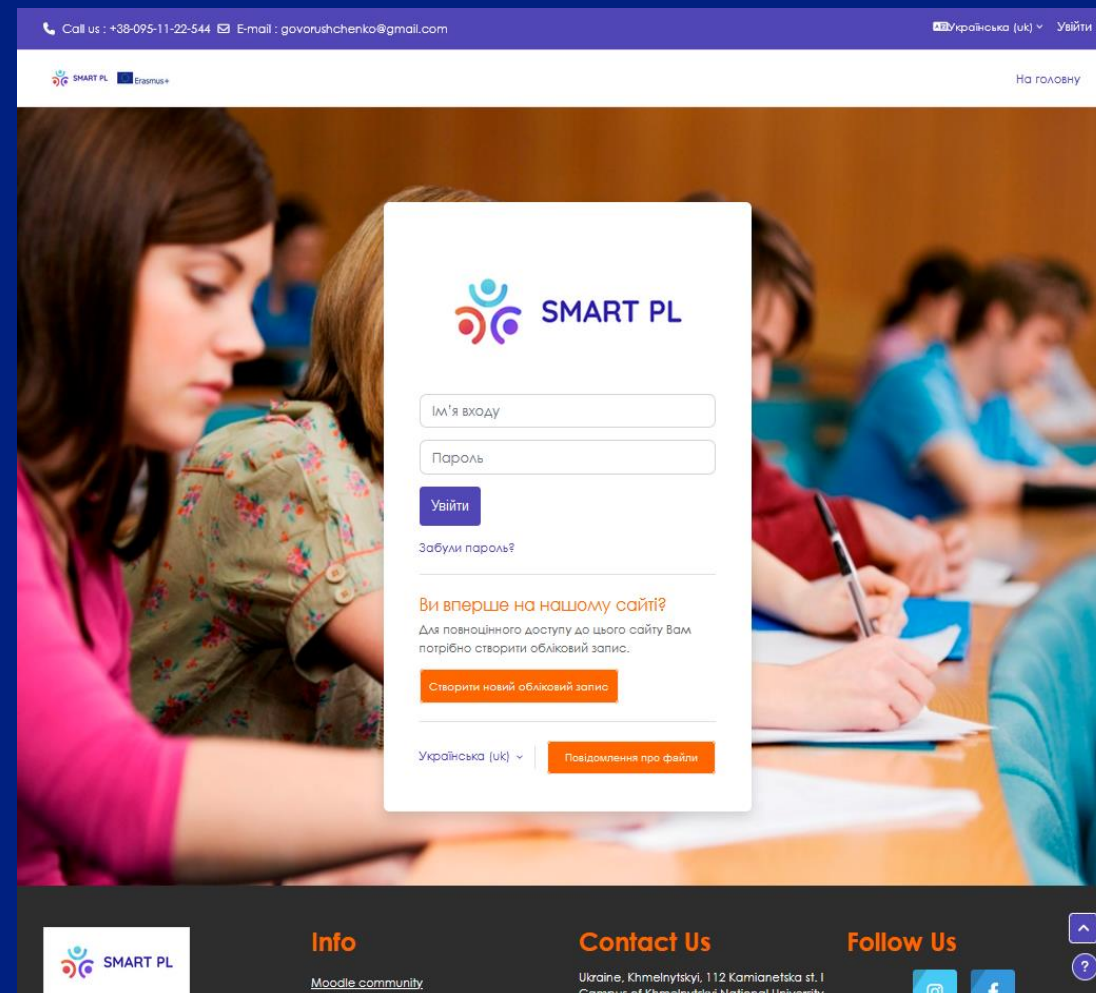
Essential skills and competences

Essential skills and competences by ESCO
(European Skills, Competences,
Qualifications and Occupations):



25 Information and communications
technology professionals

https://esco.ec.europa.eu/en/classification/occupation_main



The screenshot shows the SMART PL website interface. At the top, there is a purple header with contact information: "Call us : +38-095-11-22-544" and "E-mail : govorushchenko@gmail.com". There is also a language selector for "Українська (uk)" and a "Увійти" (Login) button. Below the header, the SMART PL logo and Erasmus+ logo are visible. The main content area features a large image of students in a classroom. Overlaid on this is a white login form with fields for "Ім'я входу" (Username) and "Пароль" (Password), a "Увійти" button, and a link for "Забуду пароль?" (Forgot password?). Below the login form, there is a section for new users: "Ви вперше на нашому сайті?" (Are you new to our site?), followed by a description and a "Створити новий обліковий запис" (Create new account) button. At the bottom, there is a footer with the SMART PL logo, an "Info" section with a "Moodle community" link, a "Contact Us" section with the address "Ukraine, Khmelnytskyi, 112 Kamianetska st. 1 Campus of Khmelnytskyi National University", and a "Follow Us" section with social media icons for Instagram and Facebook. A small "Повідомлення про файли" (File notifications) button is also present.





Occupations



- ☐ Databases / 2521.3 database developer
- ☐ Algorithmization and programming / 2512.4 software developer
- ☐ UI design / 2513.3 user interface designer
- ☐ Cybersecurity / 2529.7 ICT security engineer
- ☐ Automation technology / 2514.4 numerical tool and process control programmer
- ☐ Embedded systems / 2514.2.1 embedded systems software developer
- ☐ IT project management / 1219.6 project manager
- ☐ Computer systems and networks / 2522.1.1 ICT network administrator
- ☐ Data analysis / 2511.3 data analyst
- ☐ Web development / 2513.5 web developer
- ☐ System software / 2511.15 ICT system developer

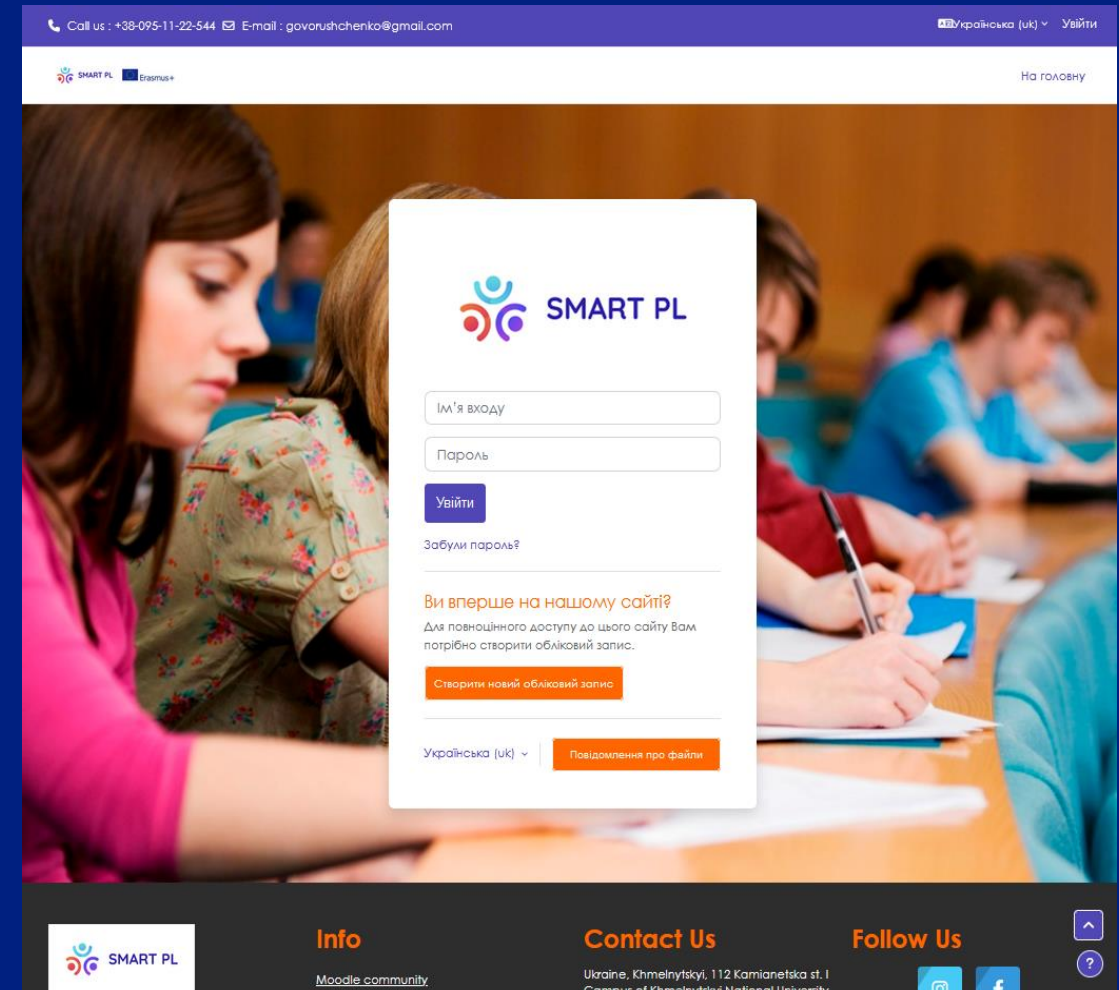




SMART-PL platform

SMART-PL information-diagnostic online Platform is an online platform that serves as a diagnostic tool for educational purposes. Such a platform has features and functionalities:


- ❑ to assess,
- ❑ to analyze,
- ❑ to provide information related to education skill testing.





SMART-PL platform

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SMART-PL information-diagnostic online Platform is an online platform that serves as a diagnostic tool for educational purposes. Such a platform has features and functionalities to assess, analyze, and provide information related to educational skill testing.

Доступні курси









Доступні курси



Доступні курси



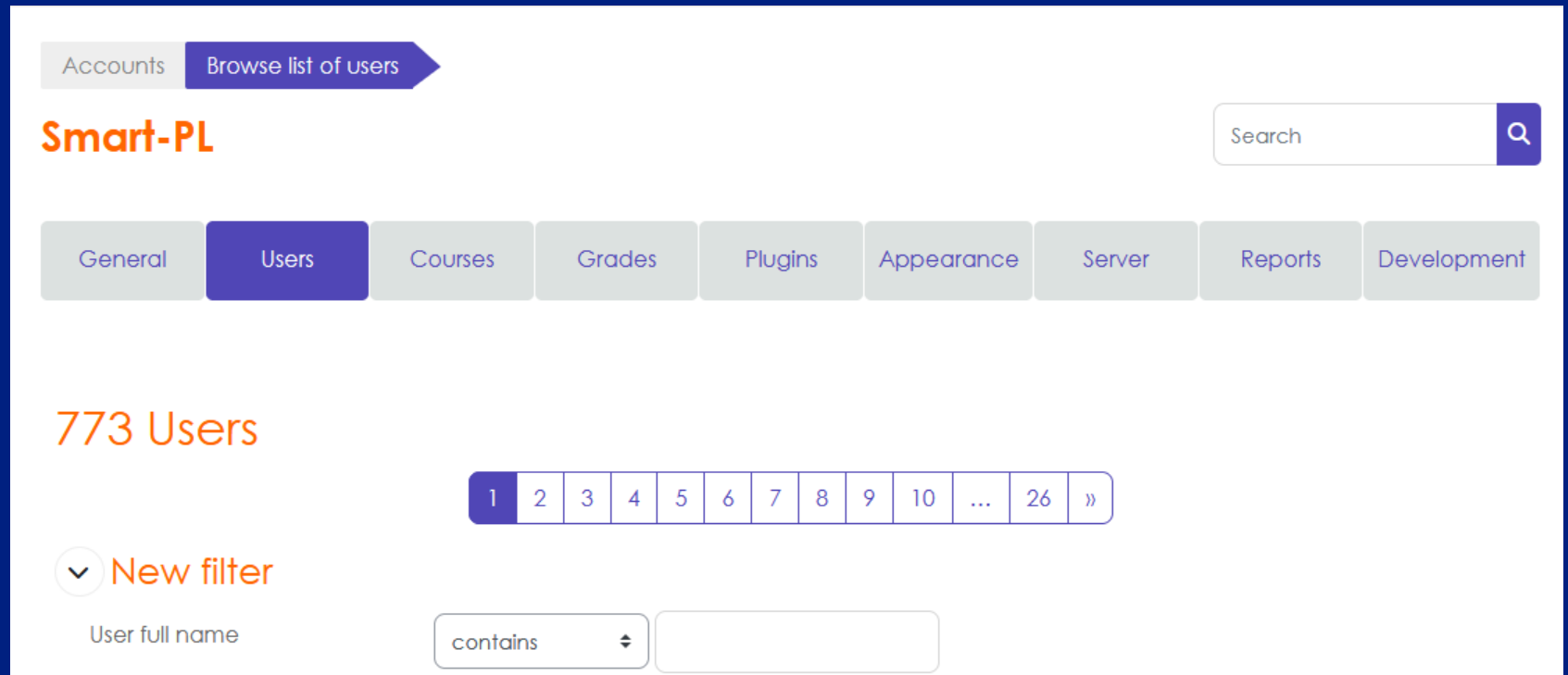
<https://smart-pl.khmnu.edu.ua/>





SMART-PL platform

Platform serves
773 users



The screenshot shows the SMART-PL user management interface. At the top, there are tabs for 'Accounts' and 'Browse list of users'. Below this, the title 'Smart-PL' is displayed in orange. To the right of the title is a search bar with the placeholder text 'Search' and a magnifying glass icon. Below the title and search bar is a row of navigation tabs: 'General', 'Users' (highlighted in purple), 'Courses', 'Grades', 'Plugins', 'Appearance', 'Server', 'Reports', and 'Development'. Below the navigation tabs, the text '773 Users' is displayed in orange. To the right of this text is a pagination bar with buttons for pages 1 through 10, an ellipsis, and a button for page 26, followed by a double arrow button. Below the pagination bar is a section for filtering, starting with a dropdown arrow and the text 'New filter'. Below this is a label 'User full name' followed by a dropdown menu showing 'contains' and an empty text input field.





SMART-PL platform

Number of tested students

No	University-partner	Number of tested students
1	KKNU (V.N. Karazin Kharkiv National University)	168
2	KhNU (Khmelnyskyi National University)	205
3	IFNUL (Ivan Franko National University of Lviv)	54
4	ONPU (Odessa National Polytechnic University)	131
5	KNU (Kryvyi Rih National University)	4
6	KSU (Kherson State University)	62
	Разом	624

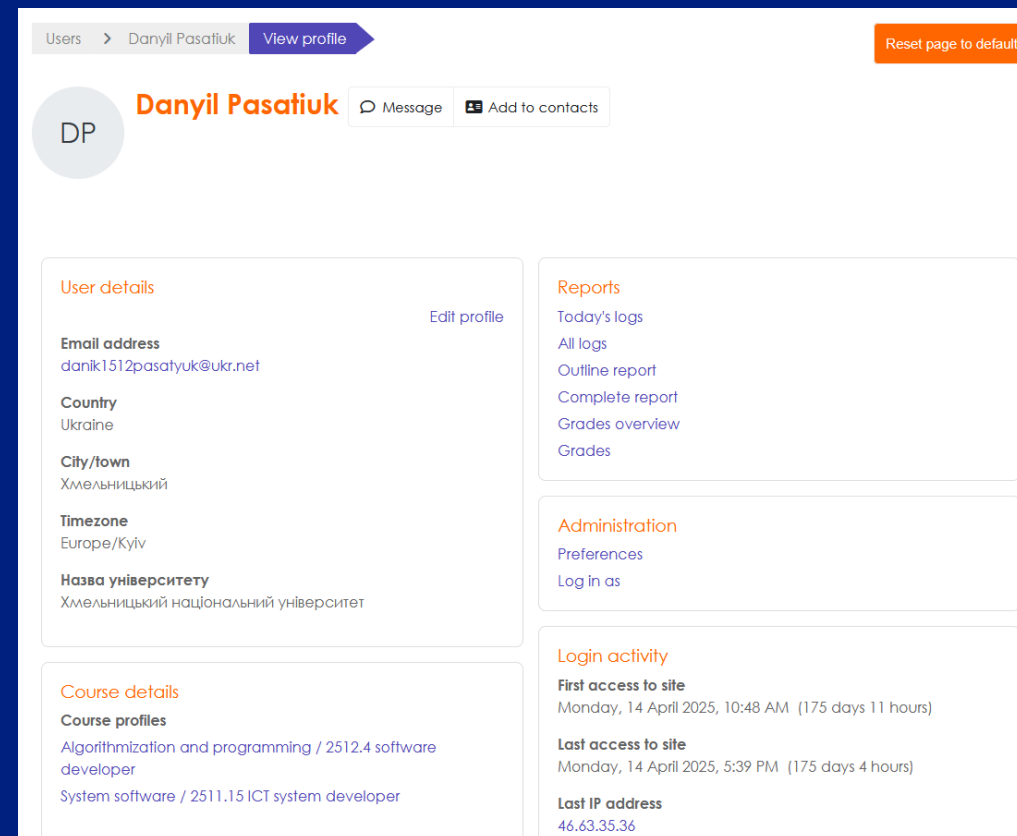




User registration and authentication

The profile contains several key sections:

- ❑ **User Details:** personal information
- ❑ **Course Details:** lists the user's enrolled courses, such as "Algorithmization and programming" and "System software."
- ❑ **Login Activity:** the first and last access dates.
- ❑ **Reports and Administration:** links for accessing logs, grades, and personal preferences.



The screenshot shows a user profile page for Danyil Pasatiuk. The page layout includes a header with navigation links, a profile card with a message and add to contacts button, and several content sections:

- User details:** Includes fields for Email address (danik1512pasatyuk@ukr.net), Country (Ukraine), City/town (Хмельницький), Timezone (Europe/Kyiv), and Name of university (Хмельницький національний університет). An "Edit profile" link is present.
- Course details:** Lists enrolled courses: "Algorithmization and programming / 2512.4 software developer" and "System software / 2511.15 ICT system developer".
- Reports:** Includes links for Today's logs, All logs, Outline report, Complete report, Grades overview, and Grades.
- Administration:** Includes links for Preferences and Log in as.
- Login activity:** Shows first and last access to the site (both on Monday, 14 April 2025) and the last IP address (46.63.35.36).



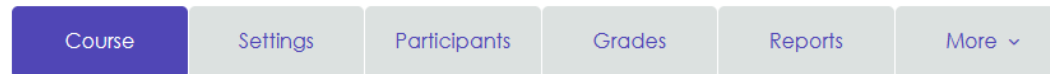


SMART-PL platform

Example

- ❑ A detailed list of 16 specific skills that the platform helps to assess.
- ❑ They cover the entire development cycle: from analysing customer requirements to create technical documentation and using specialised tools.

Algorithmization and programming / 2512.4 software developer



▼ Мета тестування

Collapse all

Мета платформи, призначена для оцінки рівня таких навичок та компетенцій для розробника програмного забезпечення:

1. Здатність аналізувати специфікації програмного забезпечення;
2. Здатність створювати блок-схеми;
3. Вміння налагоджувати програмне забезпечення;
4. Вміння визначати технічні вимоги;
5. Здатність розробляти автоматизовані методи міграції;
6. Вміння розробляти прототип програмного забезпечення;
7. Здатність визначати вимоги замовника;
8. Здатність інтерпретувати технічні вимоги;
9. Здатність керувати інженерним проєктом;
10. Здатність проводити наукові дослідження;
11. Здатність надавати технічну документацію;
12. Здатність використовувати інтерфейс для конкретного додатку;
13. Вміння використовувати патерни проектування програмного забезпечення;
14. Здатність використовувати програмні бібліотеки;
15. Здатність використовувати програмне забезпечення для технічного креслення;
16. Здатність використовувати засоби автоматизованої розробки програмного забезпечення

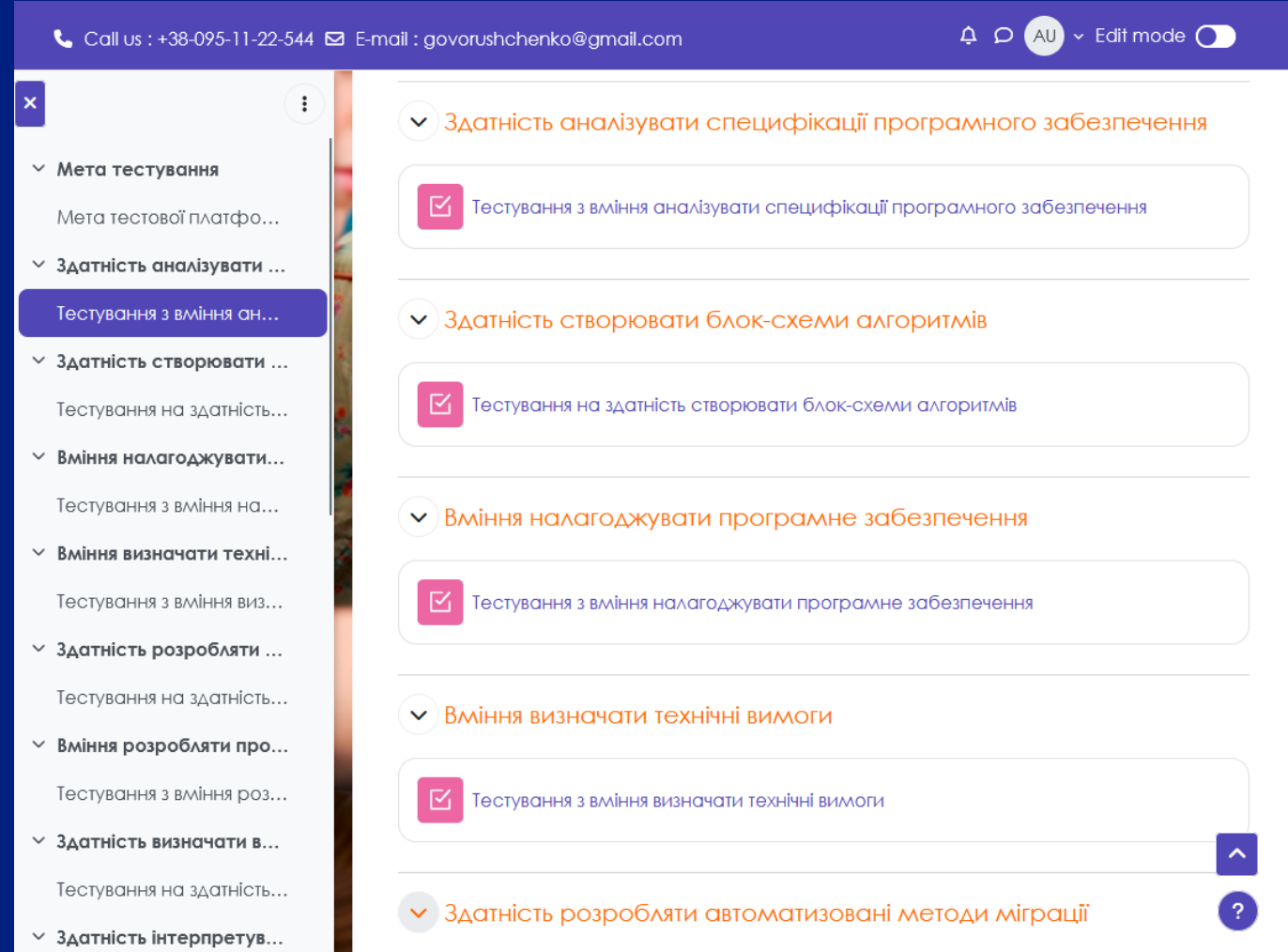
Бажаємо успішного тестування!





SMART-PL platform

SMART-PL system page where students can take tests to check their professional skills in the field of software development



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🔔 🗨 AU Edit mode

- ✕
- ⋮
- ▼ Мета тестування
 - Мета тестової платфо...
- ▼ Здатність аналізувати ...
 - Тестування з вміння ан...
- ▼ Здатність створювати ...
 - Тестування на здатність...
- ▼ Вміння налагоджувати...
 - Тестування з вміння на...
- ▼ Вміння визначати техні...
 - Тестування з вміння виз...
- ▼ Здатність розробляти ...
 - Тестування на здатність...
- ▼ Вміння розробляти про...
 - Тестування з вміння роз...
- ▼ Здатність визначати в...
 - Тестування на здатність...
- ▼ Здатність інтерпретув...

- ▼ Здатність аналізувати специфікації програмного забезпечення
 - ☒ Тестування з вміння аналізувати специфікації програмного забезпечення
- ▼ Здатність створювати блок-схеми алгоритмів
 - ☒ Тестування на здатність створювати блок-схеми алгоритмів
- ▼ Вміння налагоджувати програмне забезпечення
 - ☒ Тестування з вміння налагоджувати програмне забезпечення
- ▼ Вміння визначати технічні вимоги
 - ☒ Тестування з вміння визначати технічні вимоги
- ▼ Здатність розробляти автоматизовані методи міграції

⬆ ?





Assessment of knowledge

Test Course

Course

Settings

Participants

Grades

Reports

More ▾

✕

Adding a new Quiz?

Expand all

▾

General

Name

Description

Edit

View

Insert

Format

Tools

Table

Help

↶

↷

B

I

H-P

...

p

0 words

☐

Display description on course page?

SMART provides tools to create self-assessment tests





Tool settings

- > Timing
- > Grade
- > Layout
- > Question behaviour
- > Review options ?
- > Appearance
- > Safe Exam Browser
- > Extra restrictions on attempts

A tool to create Quiz :

Built-in tool SMART to create tests allows instructors create special tests with various settings and functions:

- ❑ Creation th Quiz . Teachers they can create tests by defining name Quiz , description , time, assessment and parameters feedback through intuitive clear interface .
- ❑ Quiz for time. Tests may be limited in time, allowing instructors set the opening and closing time , as well as the duration implementation Quiz (for example , 30 minutes).
- ❑ Attempts . Teachers they can specify how much attempts students can pass the test. Each one attempt maybe or replace the previous one , or be averaged to calculate the final result.
- ❑ Randomization . SMART supports randomization questions and answers in the quiz . It helps to prevent fraud , guaranteeing that no student will receive the same test layout.





Tools

Algorithmization and programming / 2512.4 software developer

Course Settings Participants Grades Reports More ▾

Questions ▾

Question bank

Match **All** ▾ of the following:

Match **Category** ▾ Type or select... ▾ **Default for SoftDev** ✕ ☐ Also show questions from subcategories

AND

Match **Show hidden questions** ▾ **No** ▾

+ Add condition **Clear filters** **Apply filters**

Create a new question ... **Reset columns** **Show question text in the question list?** **No** ▾

Bank of questions:

- ❑ Multiple questions. The SMART Question Bank allows instructors to create and save questions that can be reused across multiple tests and courses.
- ❑ Categories. Questions can be categorized for ease of management and search. Categories can be course specific or shared across the CIS site for wider use.
- ❑ Import and export. Instructors can import questions from external files (such as CSV, XML, or other supported formats) and export questions for use in other systems.





Evaluation and mechanisms reverse connection

Review options ?

During the attempt

- ☒ The attempt ?
- ☐ Whether correct ?
- ☒ Maximum marks ?
- ☐ Marks ?
- ☐ Specific feedback ?
- ☐ General feedback ?
- ☐ Right answer ?
- ☐ Overall feedback ?

Immediately after the attempt

- ☒ The attempt
- ☒ Whether correct
- ☒ Maximum marks
- ☒ Marks
- ☒ Specific feedback
- ☒ General feedback
- ☒ Right answer
- ☒ Overall feedback

Later, while the quiz is still open

- ☐ The attempt
- ☒ Whether correct
- ☒ Maximum marks
- ☒ Marks
- ☒ Specific feedback
- ☒ General feedback
- ☒ Right answer
- ☒ Overall feedback

After the quiz is closed

- ☐ The attempt
- ☐ Whether correct
- ☐ Maximum marks
- ☐ Marks
- ☐ Specific feedback
- ☐ General feedback
- ☐ Right answer
- ☐ Overall feedback

Evaluation methods:

- ☐ Rating scales. Instructors can define their own grading scales (eg, pass/fail, letter grades, numerical scales) or use a standard 0-100 scale.
- ☐ Gradebook Integration . Test and assignment grades are automatically added to the built-in SMART gradebook , which provides an overview of each student's performance throughout the course.
- ☐ Weighted scores. Instructors can assign specific weights to various assessments, tests, or assignments, determining how they affect the final course grade.





Rating and feedback

Download table data as Comma separated values (.csv) Download

<input type="checkbox"/>	First name / Last name	Email address	State	Started on	Completed	Time taken	Grade/10.00	Q. 1 /0.50	Q. 2 /0.50	Q. 3 /0.50	Q. 4 /0.50	Q. 5 /0.50
<input type="checkbox"/>	maxym malik Review attempt	maxm86198@gmail.com	Finished	27 August 2024 4:53 PM	27 August 2024 4:58 PM	4 mins 19 secs	2.00	✗ 0.00	✓ 0.50	✗ 0.00	✗ 0.00	✗ 0.00
<input type="checkbox"/>	maxym malik Review attempt		Finished	27 August 2024 5:00 PM	27 August 2024 5:05 PM	4 mins 23 secs	5.00	✓ 0.50	✓ 0.50	✓ 0.50	✗ 0.00	✓ 0.50
<input type="checkbox"/>	maxym malik Review attempt		Finished	27 August 2024 5:07 PM	27 August 2024 5:12 PM	5 mins 3 secs	9.50	✓ 0.50	✓ 0.50	✓ 0.50	✓ 0.50	✓ 0.50

SMART assessment system is flexible and supports different assessment types, assessment methods and feedback options.

Balance sheet:

- Course evaluations. SMART has a built-in gradebook that consolidates all grades from tests, assignments, and other assignments.
- Weighted scores. Instructors can assign weights to various course assignments to calculate final grades.





Rating and feedback

- ☐ Built-in feedback. Teachers can provide feedback directly on assignments, tests, and other assessments.

Marks	19.00/20.00
Grade	9.50 out of 10.00 (95%)
Feedback	<p>Дякуємо за Вашу спробу! Ви маєте високий рівень знань.</p> <p>Для розвитку в області програмування на рівні Middle та Senior рекомендуємо ознайомитися з більш високорівневими концепціями, архітектурними підходами та кращими практиками. Ось декілька рекомендацій:</p> <p>Книги:</p> <ol style="list-style-type: none"> 1. "Refactoring: Improving the Design of Existing Code" by Martin Fowler - Процес поліпшення коду, зберігаючи його функціональність. 2. "Designing Data-Intensive Applications" by Martin Kleppmann - Проектування великих та масштабованих систем обробки даних. 3. "The Mythical Man-Month: Essays on Software Engineering" by Frederick P. Brooks Jr. - Класична книга, що розглядає проблеми управління та розробки програмного забезпечення. 4. "Domain-Driven Design: Tackling Complexity in the Heart of Software" by Eric Evans - Проекція концепцій доменно-орієнтованого проектування на реальні проекти. 5. "The Clean Coder: A Code of Conduct for Professional Programmers" by Robert C. Martin - Питання професійної етики та ведення себе для програмістів. <p>Курси та Онлайн-ресурси:</p> <ol style="list-style-type: none"> 1. Pluralsight, Udemy, LinkedIn Learning - Платформи, що пропонують високоякісні курси для середнього та вищого рівнів програмування. 2. Software Architecture Patterns (YouTube Channel by Sourcemaking) - Відео з патернами та архітектурними рішеннями. 3. High Scalability Blog - Статті та публікації про високоякісні та високомасштабні системи. <p>Документація та Інструменти:</p> <ol style="list-style-type: none"> 1. Official Documentation of Frameworks and Tools - Детально вивчайте офіційну документацію технологій, які використовуєте. 2. Docker Documentation - Якщо ви ще не працювали з Docker, вивчення цього інструменту для контейнеризації може бути корисним. <p>Участь у Ком'юніті:</p> <ol style="list-style-type: none"> 1. Meetups та Конференції - Участь у технічних заходах для обміну досвідом та знайомства з іншими професіоналами.

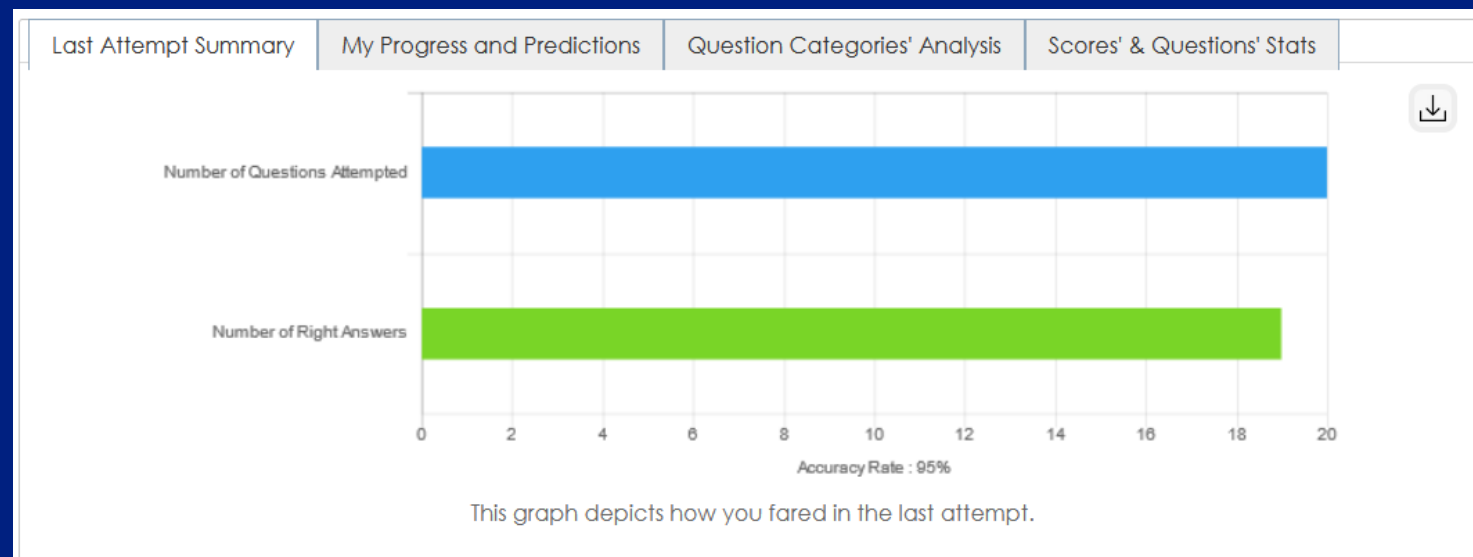




Progress reports

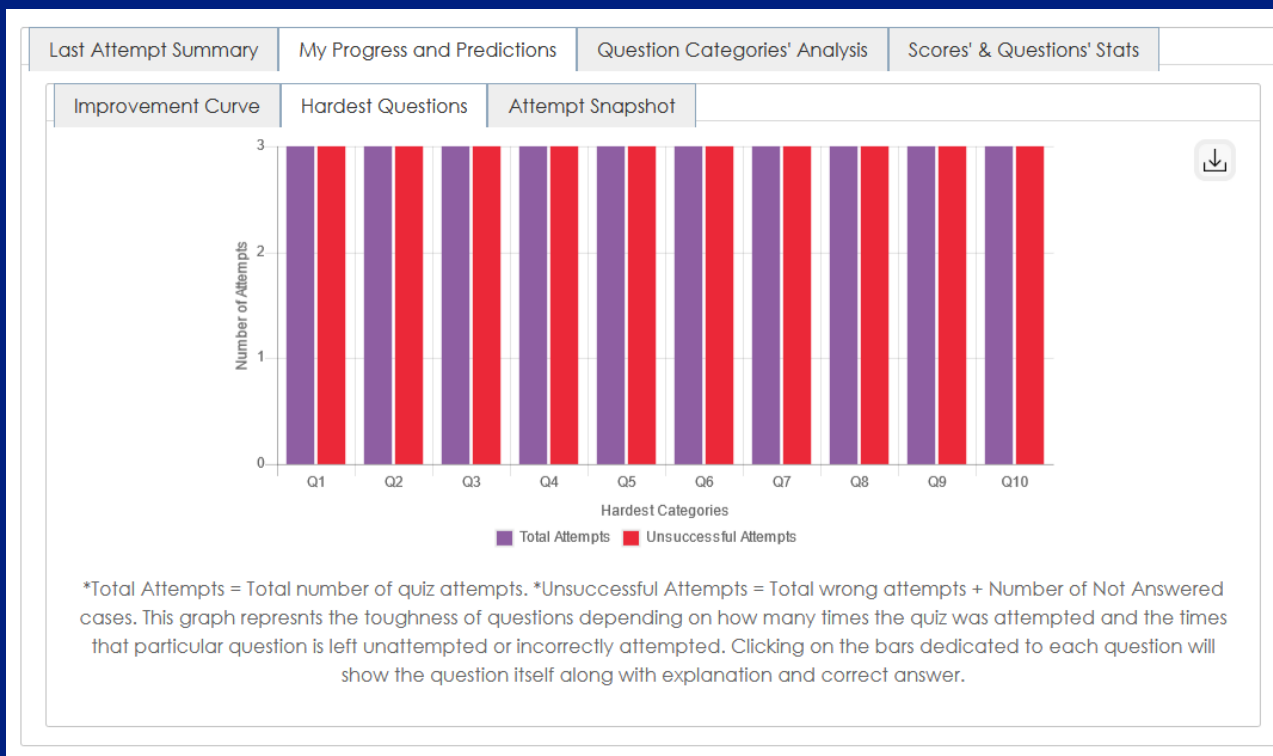
Steps to monitor students' progress in basic skills

- Select the Ratings tab
- Select the Test Analytics menu item
- Select the View Analytics link





Reporting and analytics for tests



SMART provides several reporting tools to help instructors monitor test performance and make data-driven decisions.

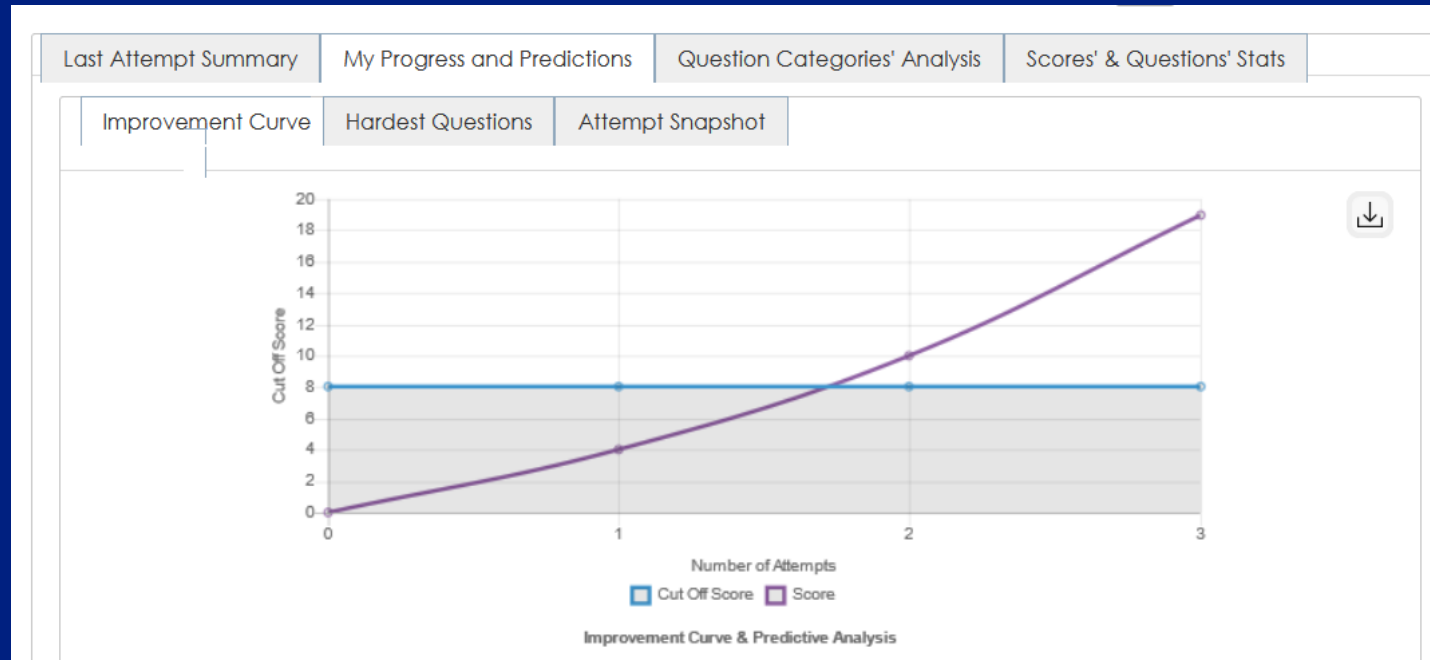
Quiz reports :

- Attempt report. Shows all student attempts to complete the test, as well as scores, time spent, and completion status.
- Analysis of questions. Provides detailed performance statistics for individual questions, helping instructors identify which questions were too difficult, too easy, or ambiguous.





Reporting and analytics for tests

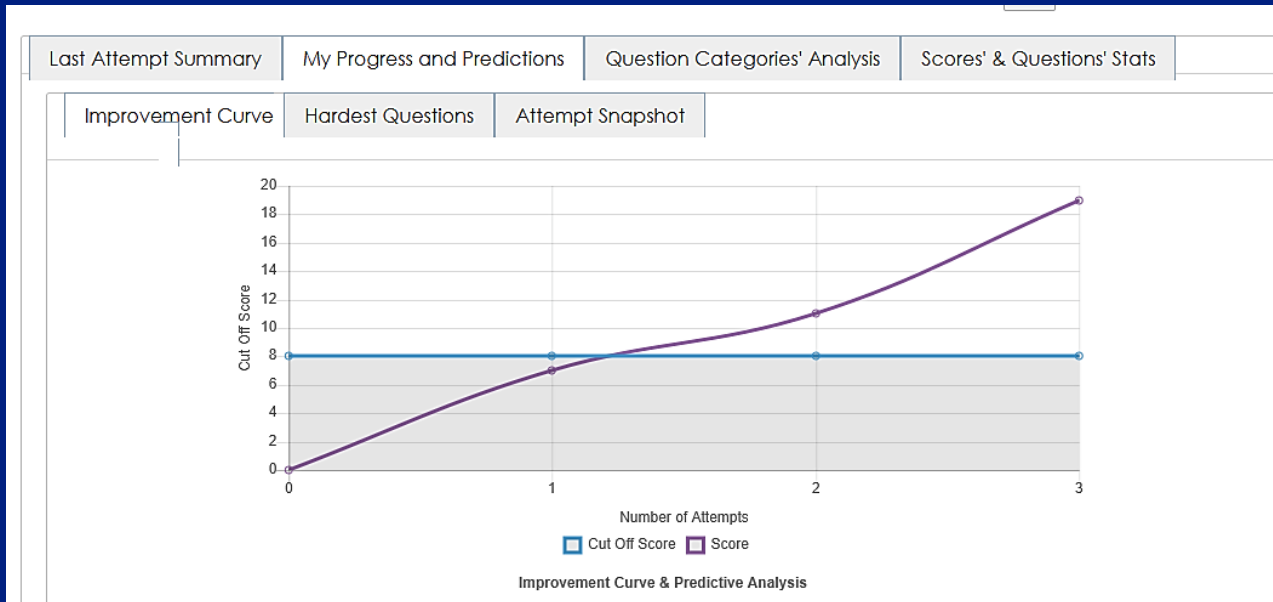


Activity logs





Reporting and analytics for tests



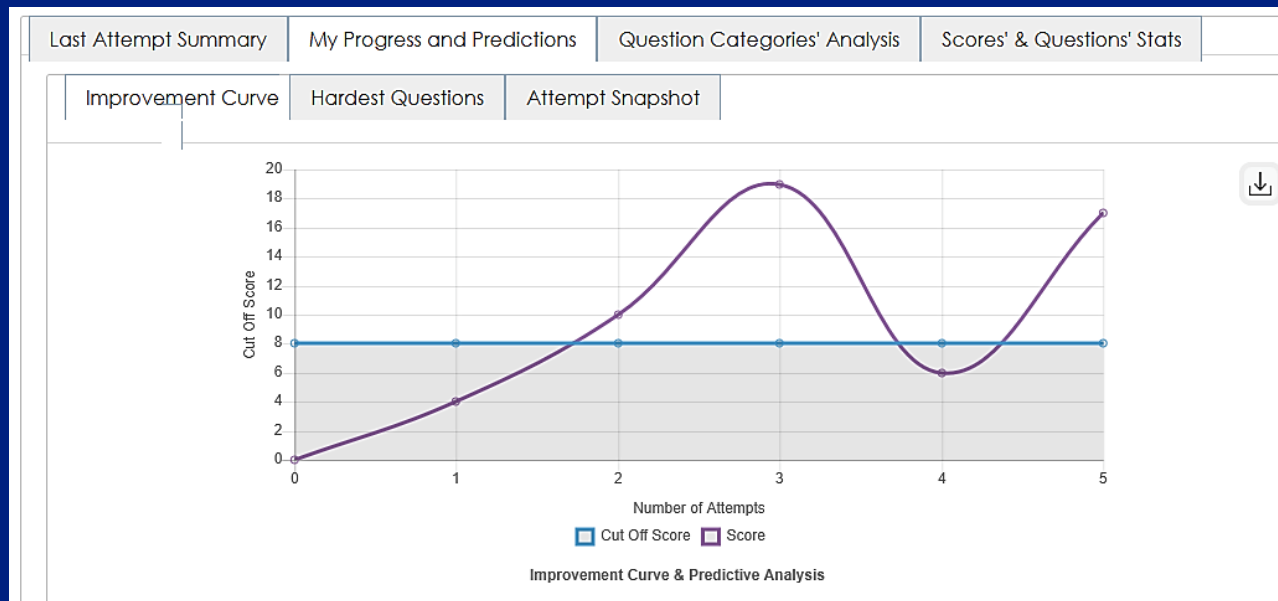
Activity logs





Reporting and analytics for tests

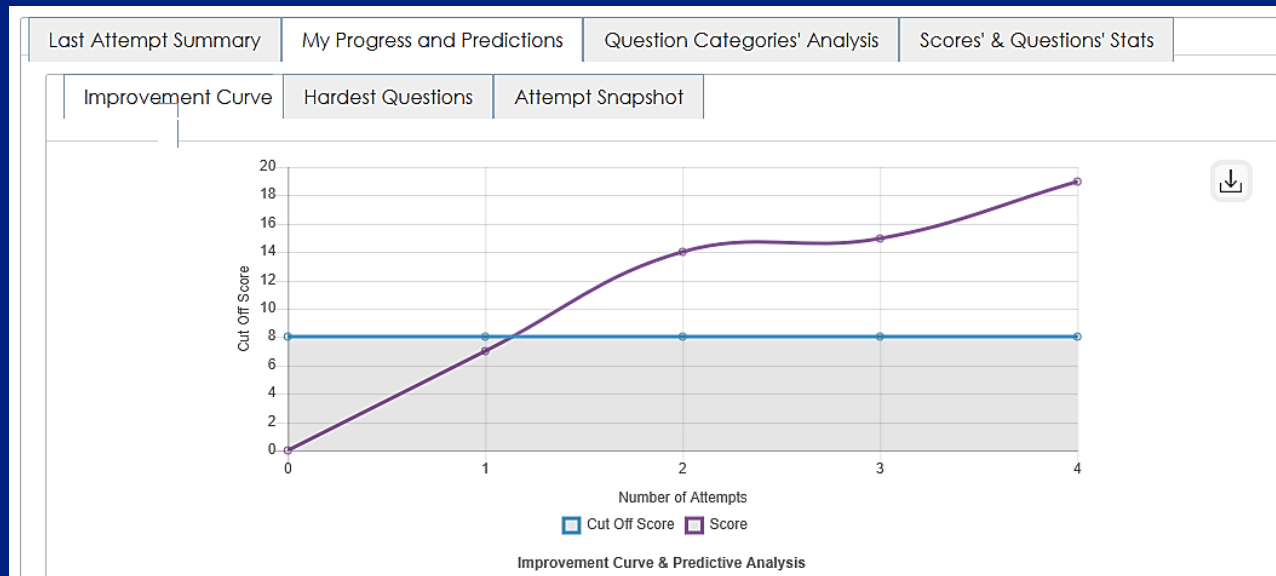
Activity logs





Reporting and analytics for tests

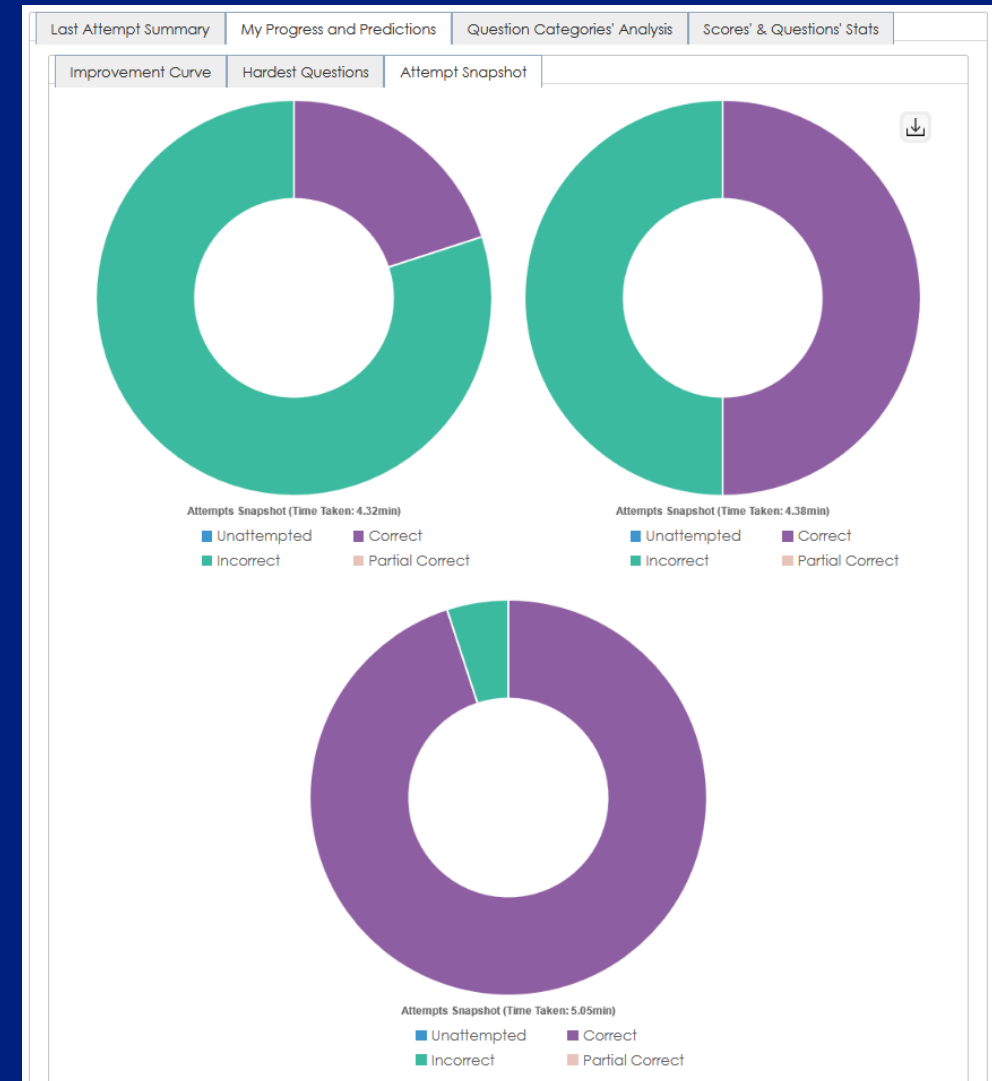
Activity logs





Module for tracking and reporting

Visual progress indicators. Students can see their progress in the course with visual indicators (such as flags) next to each activity. This helps students keep track of what they have completed and what is still to come.





Thank you for your attention!

