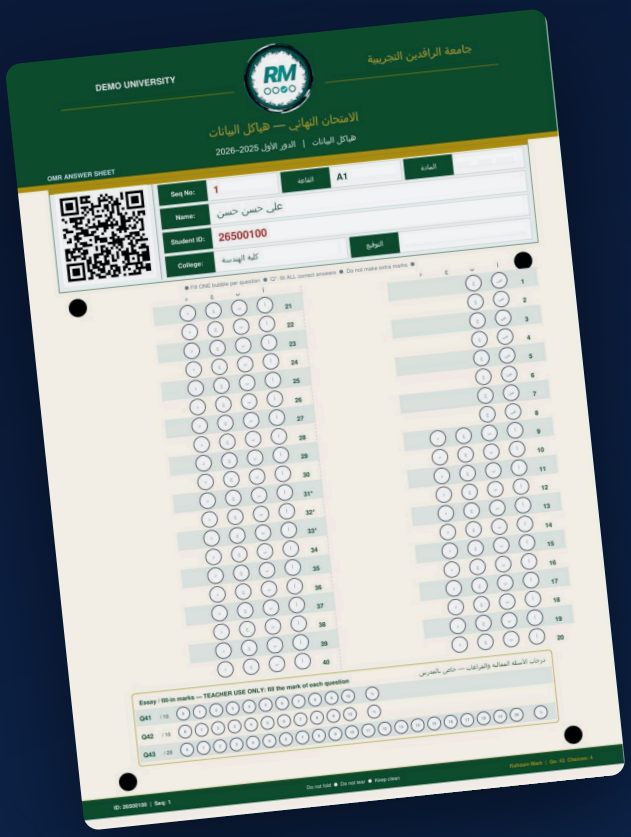
RAFIDAIN MARK · رافدين مارك

User Guide

Bubble answer-sheet grading system

- Preparing and printing answer sheets
- Bulk grading and custom templates
- Results, analysis and reports



Hawa Al-Rafidain — Airmax
hawa-alraafidayn.iq

Version 2.7.1

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1 Introduction

Rafidain Mark grades bubble answer sheets on the teacher's or department's own computer, with no internet needed. It prints answer sheets with each student's name, reads the scanned sheets (one PDF for a whole hall), marks them with the exam's rules, and produces results, reports and statistics.

Main features

- Answer sheets printed with each student's name, number and QR code; 18 ready templates and a designer for logo, colours, paper colour and bubble size.
- Question types: single answer (3–5 choices), true/false, multiple answers, and essay or fill-in questions whose mark the teacher fills on the same sheet — among the items or as extra questions after them.
- Answer letters in Arabic (أ ب ج د هـ — ص خ) or English (A B C D E — T F).
- Fast bulk grading — about a tenth of a second per sheet — with automatic correction of skew, scanner stretch and upside-down sheets.
- Custom templates for sheets the program did not print (e.g. ministry sheets), with barcode reading and names from an Excel list.
- Weighted questions, wrong-answer penalty, partial credit, rounding, a mark out of the exam's own total (e.g. 60) and the Iraqi grade scale.
- Sheet review and manual corrections with a record of every change; instant re-scoring after a key change, without rescanning.
- Exam analysis — difficulty, discrimination, distractors, reliability (KR-20) — a full Excel export and a PDF report per student.
- Arabic and English interface, light and dark themes, several users with permissions.

What is new in version 2.6

Note: 2.7.1: **Interactive learning** — a "Learn" button with on-screen tours of every section and automatic hints for new users; the phone scanner signs in with the **licence number** or a QR code from the program (no username/password); licence changes (plan, date) reach the program within minutes.

Note: 2.7.0: **Phone scanning** — photograph the sheets with a phone at hawa-alraafidayn.iq/scan; they reach the program as a PDF ready for grading (the "From phone" button).

Note: 2.6.7: the student list (Excel) finds the code column even when a sequence column named no / رقم comes before it, so names link correctly.

Note: 2.6.6: picking another template in Generate Sheets brings back its own colours (paper colour, logo position and the other settings stay).

Note: 2.6.5: fast mode in custom templates now reads the barcode zone and links the names from the Excel list directly.

Note: 2.6.4: a new Rafidain Mark logo (interface, program icon and the default sheet logo), and the "Check the key" note in the item analysis is now translated and uses the sheet's letters.

Note: 2.6.3: free number of questions (1–200), extra written questions (essay / fill-in) after the items, any maximum mark kept for essays (e.g. 1), and the "Use the total points" button.

- New question types: true/false, multiple answers, essay, bonus, cancelled, and several accepted answers.
- Grading options (penalty, partial credit, rounding, exam total, grade scale).
- Answer-sheet designer with a preview of the real sheet.
- Arabic or English letters on the sheet.
- Saved manual corrections, re-scoring, exam analysis and the new Excel export.
- Reading improvements: upside-down sheets, corner marks, lighter bubble letters, and a warning for empty or damaged sheets.

Requirements

System	Windows 10 or 11 (64-bit), or macOS on Apple silicon (M1 or later)
Processor and memory	Any recent computer; 4 GB RAM or more. Grading uses every processor core.
Browser	Chrome, Edge, Safari or Firefox (the program opens it for you)
Scanner	Any scanner that saves PDF; an automatic document feeder (ADF) is best for many sheets
Printer	Laser or inkjet, A4 paper, actual size (100 %)
Internet	Not needed for work; only for licence activation and updates

2 Installation and first start

Installing on Windows

1. Run `RafidainMark_Setup_2.7.1.exe` and follow the installer.
2. A **Rafidain Mark** shortcut appears on the desktop and in the Start menu.
3. No XAMPP, Python or any other program is needed — everything is built in.

Installing on Mac

1. Open `RafidainMark_2.7.1_mac.dmg` and drag the program into **Applications**.
2. On the first start, if macOS shows a warning: right-click the icon → **Open** → **Open**.

Starting the program

Click the program icon: the local server starts and the browser opens `http://localhost:8833`. A program icon appears next to the clock (system tray on Windows, menu bar on Mac); its menu reopens the program or stops it. Clicking the program icon again does not start a second copy — it opens the browser on the running one.

Licence activation

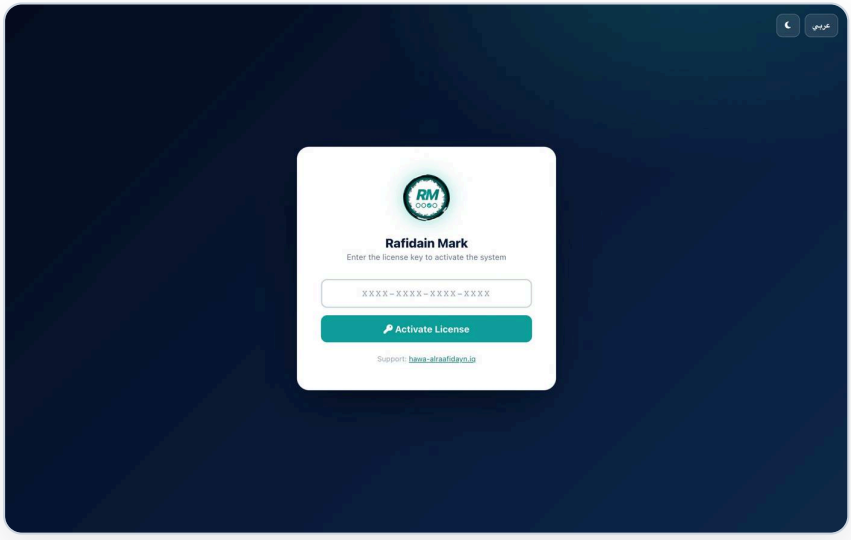


Figure 1: The licence activation screen

On the first start the activation screen appears. Enter the licence key in the form `XXXX-XXXX-XXXX-XXXX` and click **Activate** (internet needed once). The licence status, plan and days left are shown later on the **Licence** page and in the sidebar.

Signing in

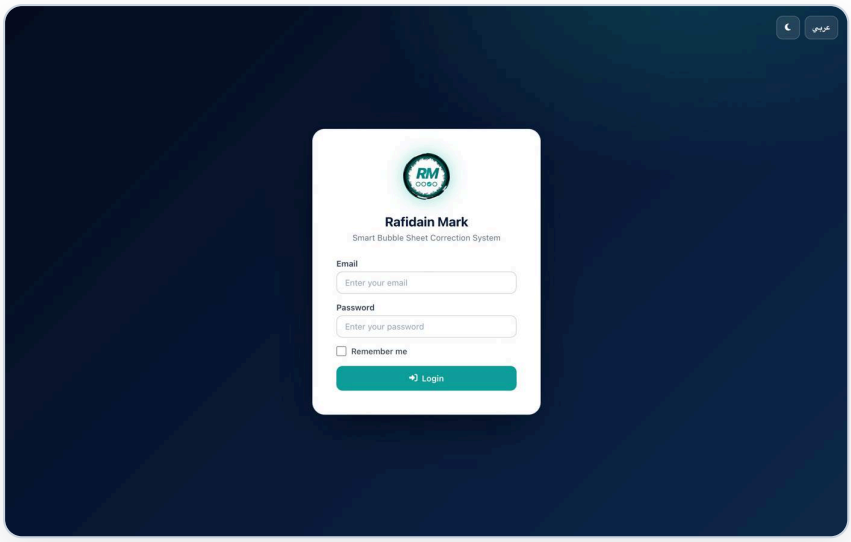


Figure 2: The sign-in screen — language and light/dark buttons at the top

The default administrator sign-in is `admin@school.com` with password `admin123`.

> **Important:** Change the default e-mail and password in **Settings** right after the first sign-in.

Where data is kept, and backups

Windows	`%LOCALAPPDATA%\RafidainMark`
Mac	`~/Library/Application Support/RafidainMark`
Contents	the database `rafidain.db`, uploaded PDFs, generated results, the logo, the licence file and the settings file `config.json`

> **Tip:** To back up: stop the program from its tray icon, then copy this whole folder. Updating or uninstalling never deletes it.

Using it from other computers on the network

Open `config.json` in the data folder and change `"host": "127.0.0.1"` to `"0.0.0.0"` (`"port"` can be changed too), then stop and restart the program. Other computers then open it at the main computer's address, e.g. `http://192.168.1.20:8833`.

Updates

The program checks for a new version every 6 hours and shows a banner to the administrator. You can also check from **Settings** → **Updates**. The update is downloaded, its digital signature is verified, it installs and the program restarts. Your data is not touched.

3 The interface and the workflow

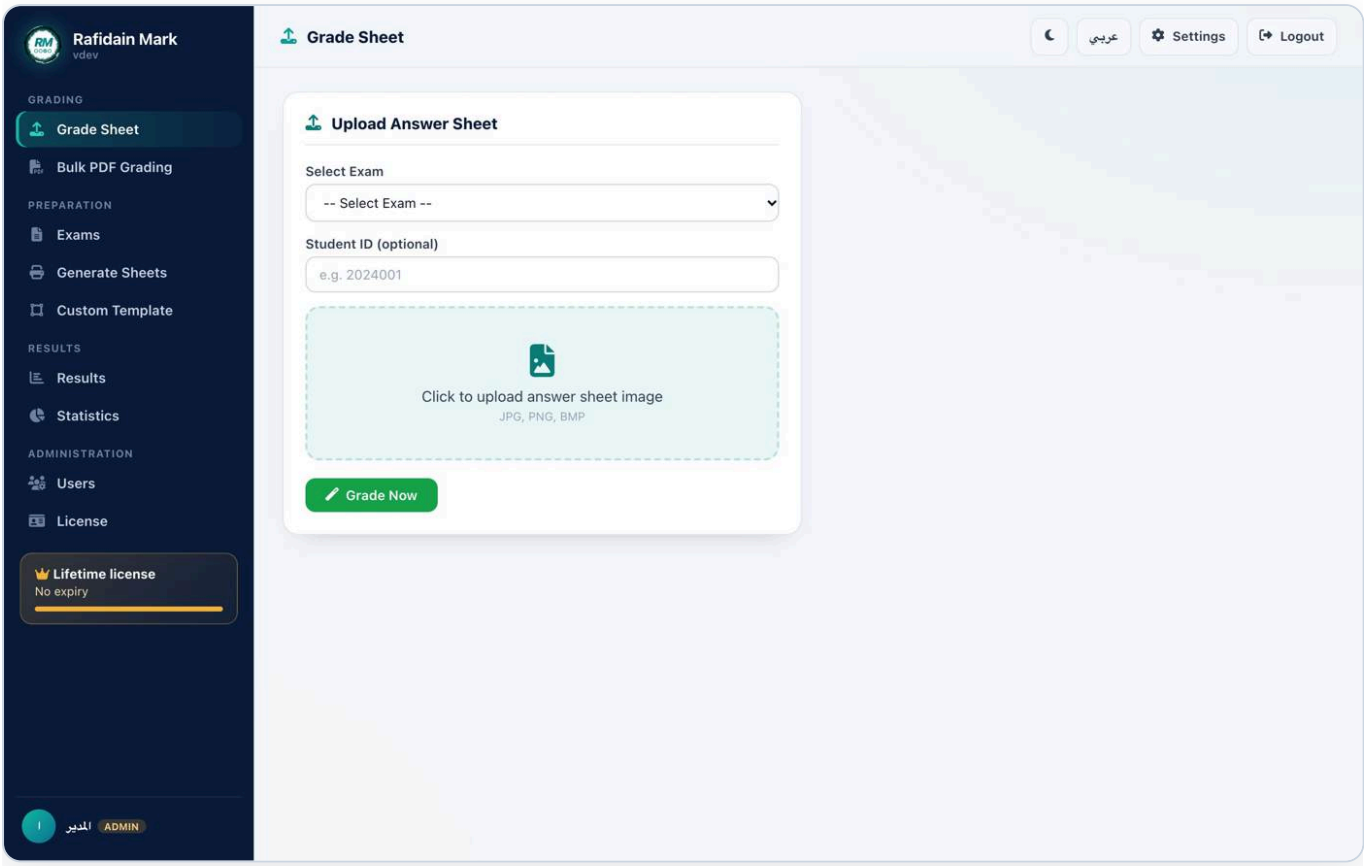


Figure 3: The main screen: the sidebar (sections) and the top bar

Grading	grade one sheet (image), bulk grading (PDF)
Preparation	exams and answer keys, generate answer sheets, custom templates
Results	grading sessions and their details, overall statistics
Administration	users (administrator), licence
Top bar	light/dark theme, Arabic/English, settings, sign out

Interactive learning (the “Learn” button)

The program teaches you while you work: the **Learn** button in the top bar opens a list of tours; each tour opens its section, highlights every control and explains it step by step. Move with Next/Back or the arrow keys, and leave with Esc.

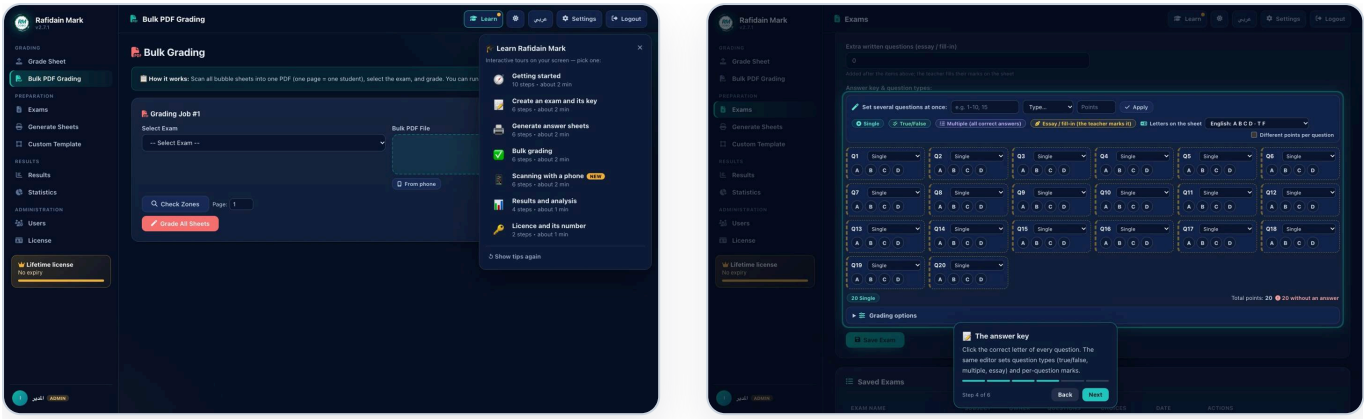


Figure 4: Right: the list of tours (✓ on those already seen). Left: the "Create an exam" tour explaining the answer-key editor.

- A **welcome notice** at each user's first sign-in offers the getting-started tour (2 minutes).
- **First-visit tips**: the first time you open a section (exams, sheets, bulk grading, results, licence) its tour is suggested.
- **What is new**: after every update a notice shows the new feature with a tour.
- Tours: getting started, exam and answer key, generating sheets, bulk grading, phone scanning, results and analysis, licence.

The complete workflow

1. **Create the exam** with its answer key, question types and grading options (chapter 4).
2. **Generate the answer sheets** with the students' names and print them (chapter 5).
3. **Exam day**: students fill the bubbles; the teacher marks the essay questions on the sheet, if any (chapter 6).
4. **Scan** the sheets into one PDF file.
5. **Grade** the file in Bulk Grading and review the flagged sheets (chapter 7).
6. **Export** the results to Excel or PDF and read the exam analysis (chapters 10 and 11).

> **Note:** Sheets not printed by the program (such as ministry sheets) are graded with a **custom template** (chapter 9) instead of steps 2 and 5.

4 Exams and answer keys

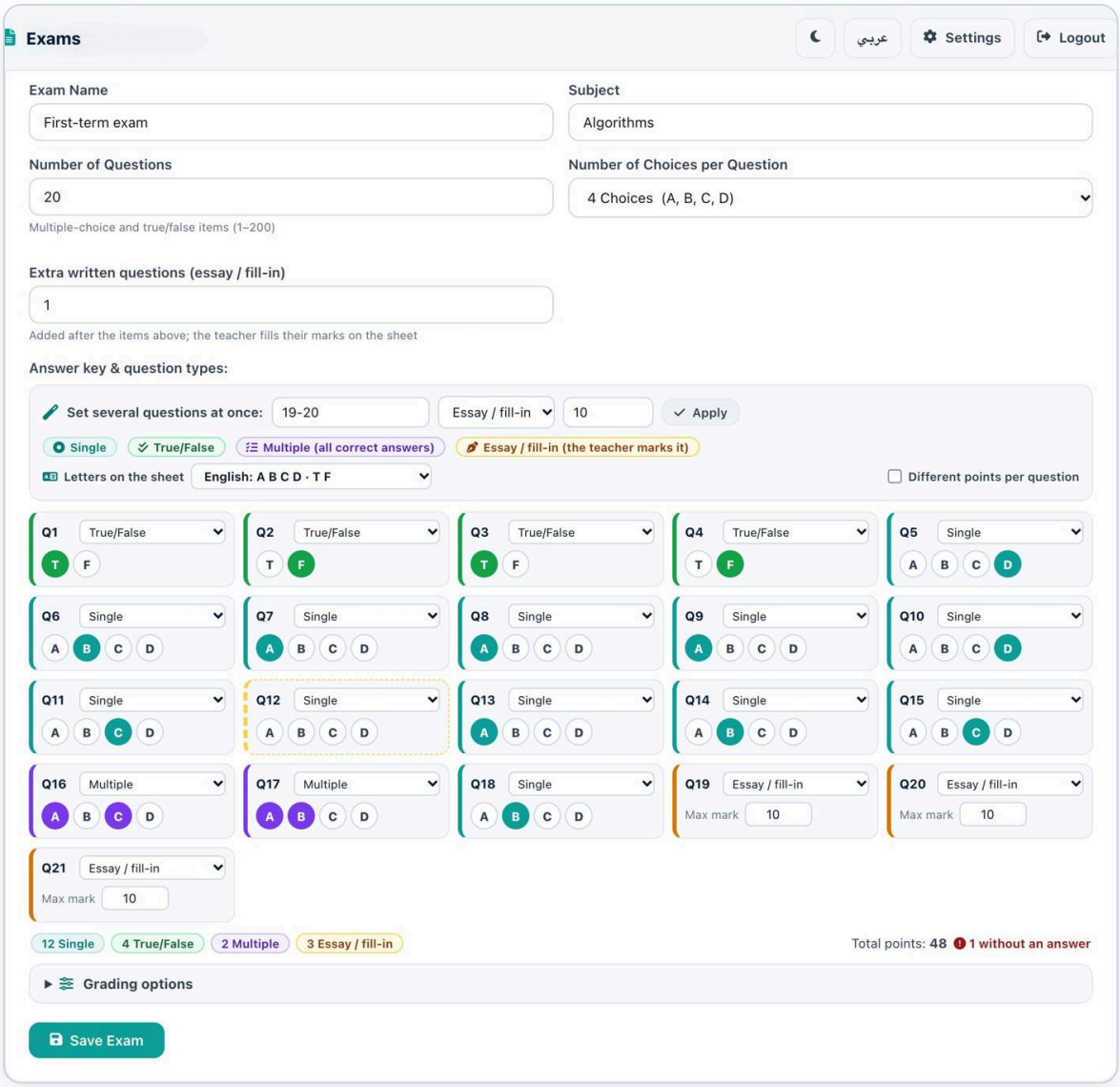


Figure 5: Creating an exam: name, subject, number of questions and choices, and the key editor

Exam details

Exam name	printed on the sheet and shown in the results
Subject	printed under the exam name
Number of questions	type any number from 1 to 200 for the multiple-choice and true/false items. Columns and bubble size are chosen automatically
Extra written questions	0 to 10 questions (essay or fill-in) added after the items and numbered after them — e.g. 10 items + one essay = 11 questions. The teacher fills their marks on the sheet
Number of choices	3, 4 or 5 per question (true/false questions get two bubbles)

The answer-key editor

Each question has a small card with its number, a type list and the answer letters. Click the correct letter to select it (click again to clear it). Multiple-answer questions take several letters. A question without an answer shows a dotted border and you are asked about it when saving.

Question types

Single	one correct bubble. Two filled bubbles count as a "double answer" and are wrong.
True/False	only two bubbles on the sheet: T and F (or ص and خ).
Multiple	all correct answers must be filled. A star ***** is printed next to the number with a note to students. How it is marked is set in the grading options.
Essay / fill-in	the student writes the answer (an essay, or filling a blank in an empty space on the sheet). No choice bubbles; an "essay / fill-in marks" area is printed at the bottom where the teacher fills the mark. Set its **maximum mark** (e.g. 1 or 2 for a blank, 10 for an essay).
★ Bonus	everyone gets the question's points (e.g. a misprinted question).
⊘ Cancelled	the question is dropped from the total.

Tip: Example: an exam out of 20 = 9 true/false items + item 10, a blank worth 1 + one extra essay out of 10. Type 10 questions and 1 extra written question, make item 10 "Essay / fill-in" worth 1, then click "Use the total points".

Tip: To accept more than one answer for a single-answer question (after an appeal, for example), make it "Multiple" with the "Any correct choice" policy, or set its key to `A/B`.

Setting several questions at once

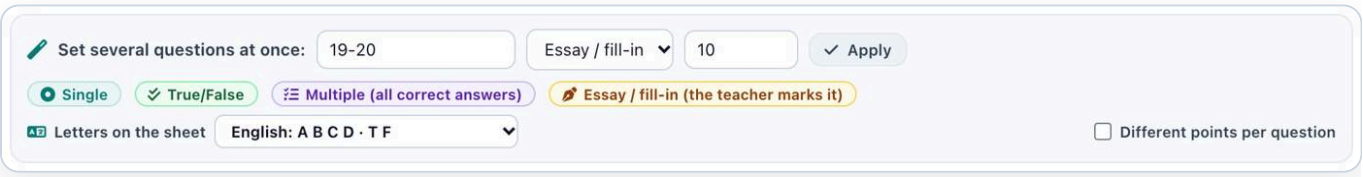


Figure 6: The toolbar: range, type, points, apply — and the letters on the sheet

1. Type the question numbers in the range box, e.g. `1-10, 15`.
2. Choose the type (true/false, multiple, essay, bonus, cancelled) and/or the points.
3. Click **Apply**.

Different points per question: turn it on to show a points box on each card (default: one point per question). **Letters on the sheet**: English (A B C D · T F) or Arabic (أ ب ج د · ص خ). Arabic sheets run right

to left: the first column and the letter أ are on the right.

Grading options

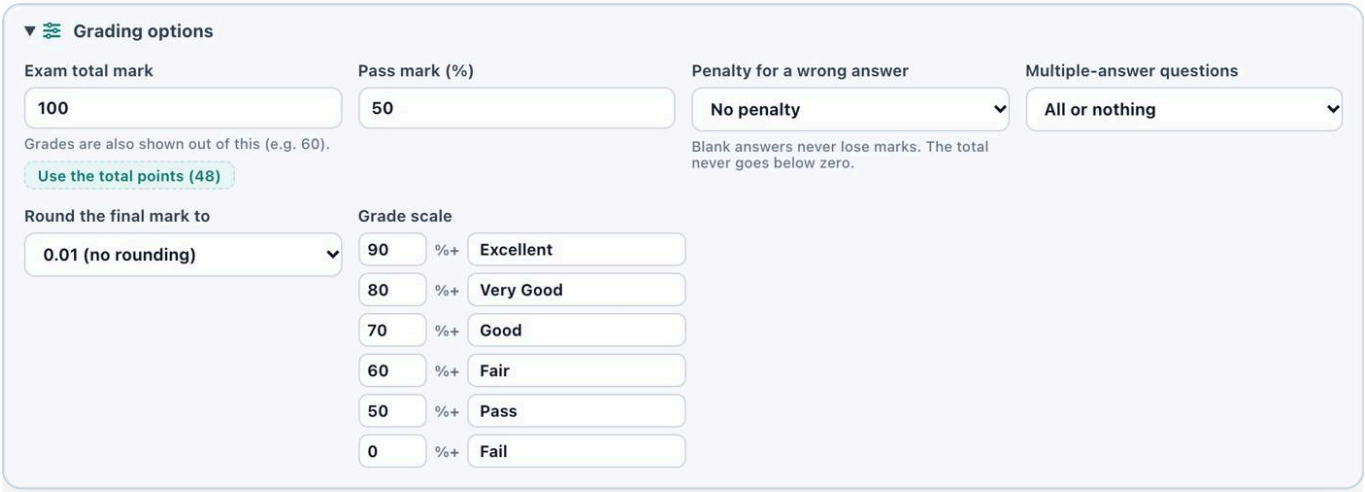


Figure 7: Grading options

Exam total mark	each student's mark is also shown out of this total, e.g. 60. **Use the total points** sets it to the sum of the questions' points (e.g. 20). The percentage is always kept.
Pass mark (%)	the percentage at or above which a student passes (default 50).
Penalty for a wrong answer	none, ¼, ⅓, ½ or the full question. Blank answers never lose marks; the total never goes below zero.
Multiple-answer questions	all or nothing · partial (right − wrong) · partial, zero if any wrong · any correct choice with no wrong one.
Round the final mark to	0.01 (none), 0.25, 0.5 or whole marks — applied to the mark out of the exam total.
Grade scale	default: Excellent 90+, Very Good 80+, Good 70+, Fair 60+, Pass 50+, Fail. Limits and names can be edited.

The exam list and editing

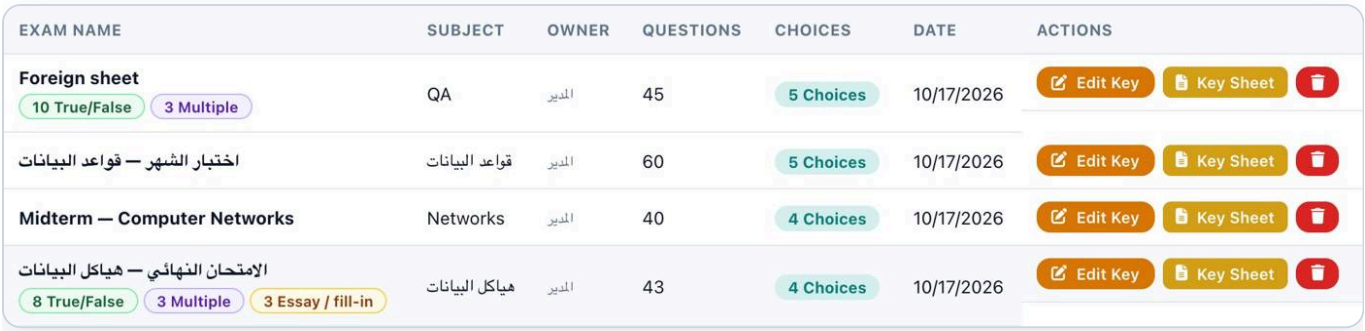


Figure 8: Saved exams with a summary of their question types

Each exam has **Edit key** (the same editor in a window), **Key sheet** and **Delete** (deletes its results too).

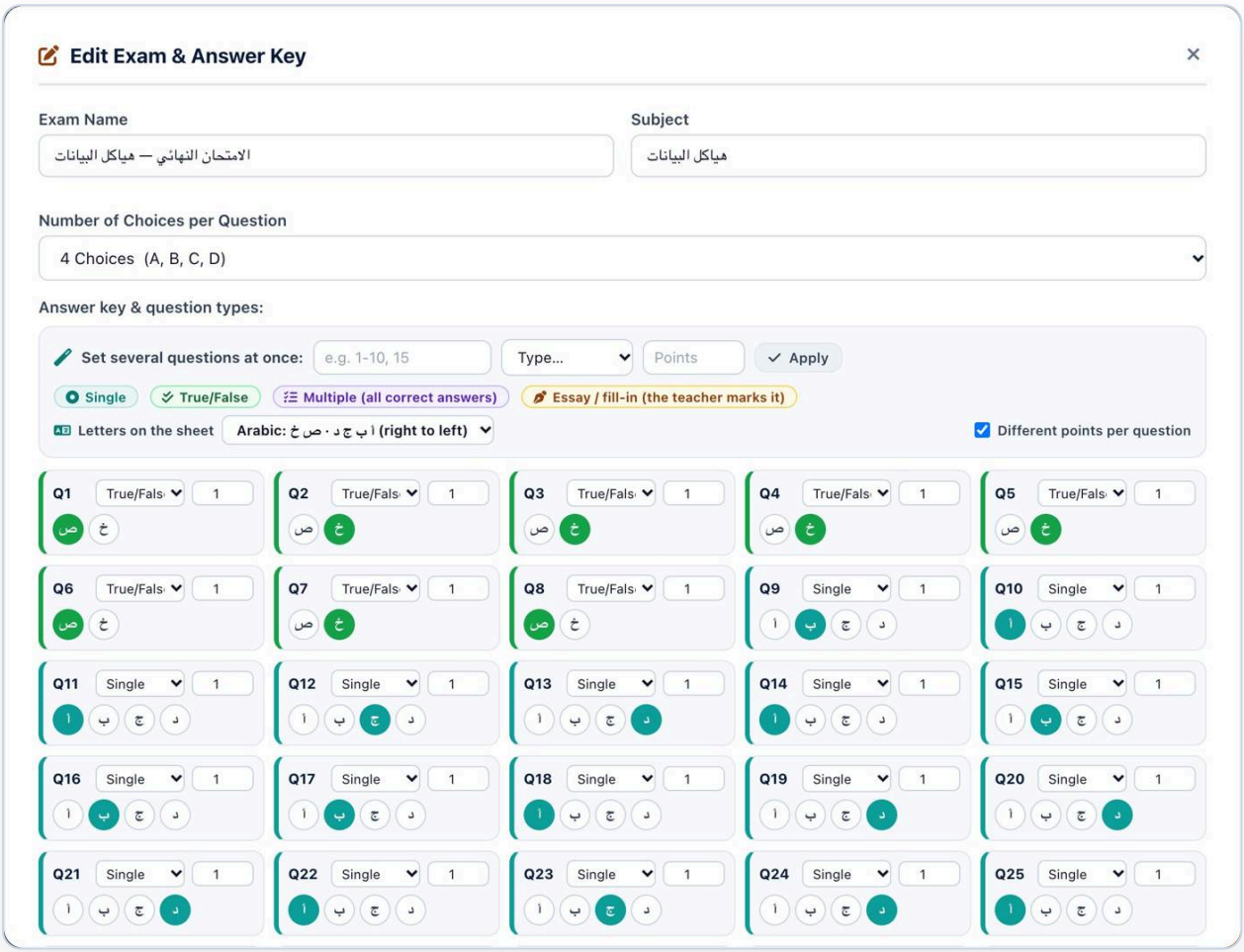


Figure 9: The edit exam window

> **Tip:** When you change the key or grading options of an exam that was already graded, the program asks **Re-score the sessions now?** — accept, and every sheet is re-marked within a second, without rescanning.

The answer-key sheet

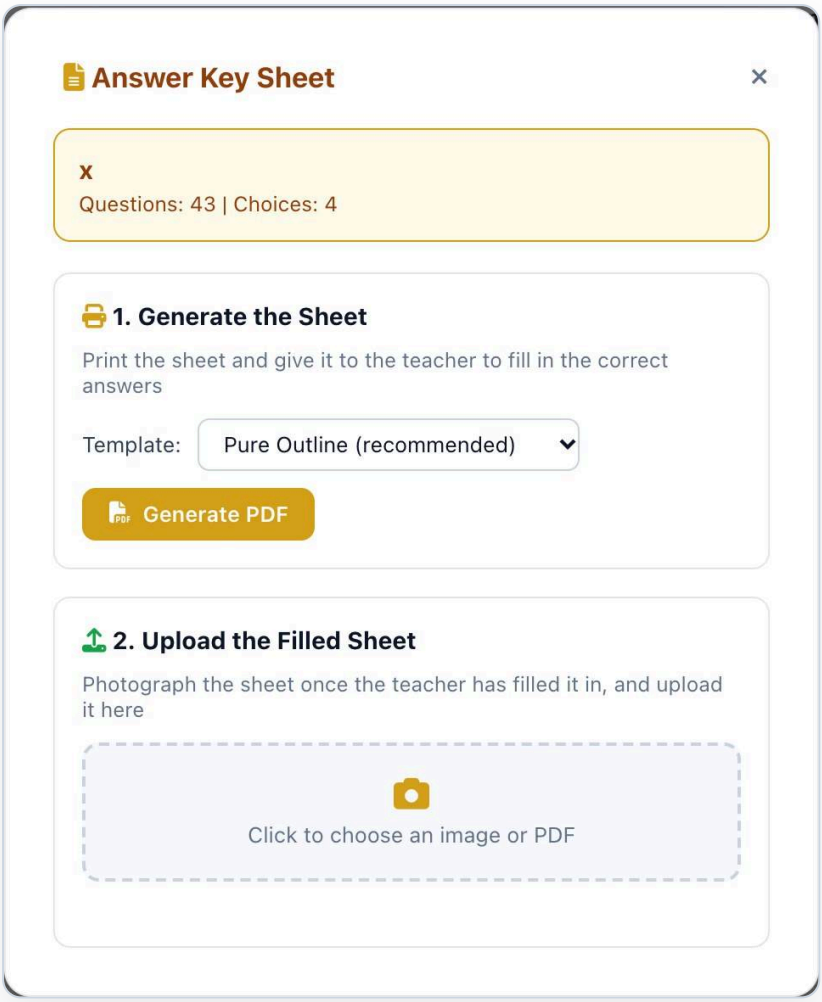


Figure 10: The answer-key sheet: generate it, then upload it filled to read the key

Instead of clicking the key in, print the **key sheet** (same layout as a student sheet), fill the correct answers on it and upload its image or PDF; the program reads the key into the exam and shows it for review. Fill all answers of multiple-answer questions; leave essay questions empty.

5 Generating answer sheets



Figure 11: Sheet details: exam, university names, college and department

1. Choose the **exam**.
2. Type the university name in English and/or Arabic, and the college and department (optional).
3. Pick a **sheet template**, then customise the design if you like.
4. Enter the student list or import it from Excel.
5. Click **Generate PDF**, then open or download it and print.

Ready templates

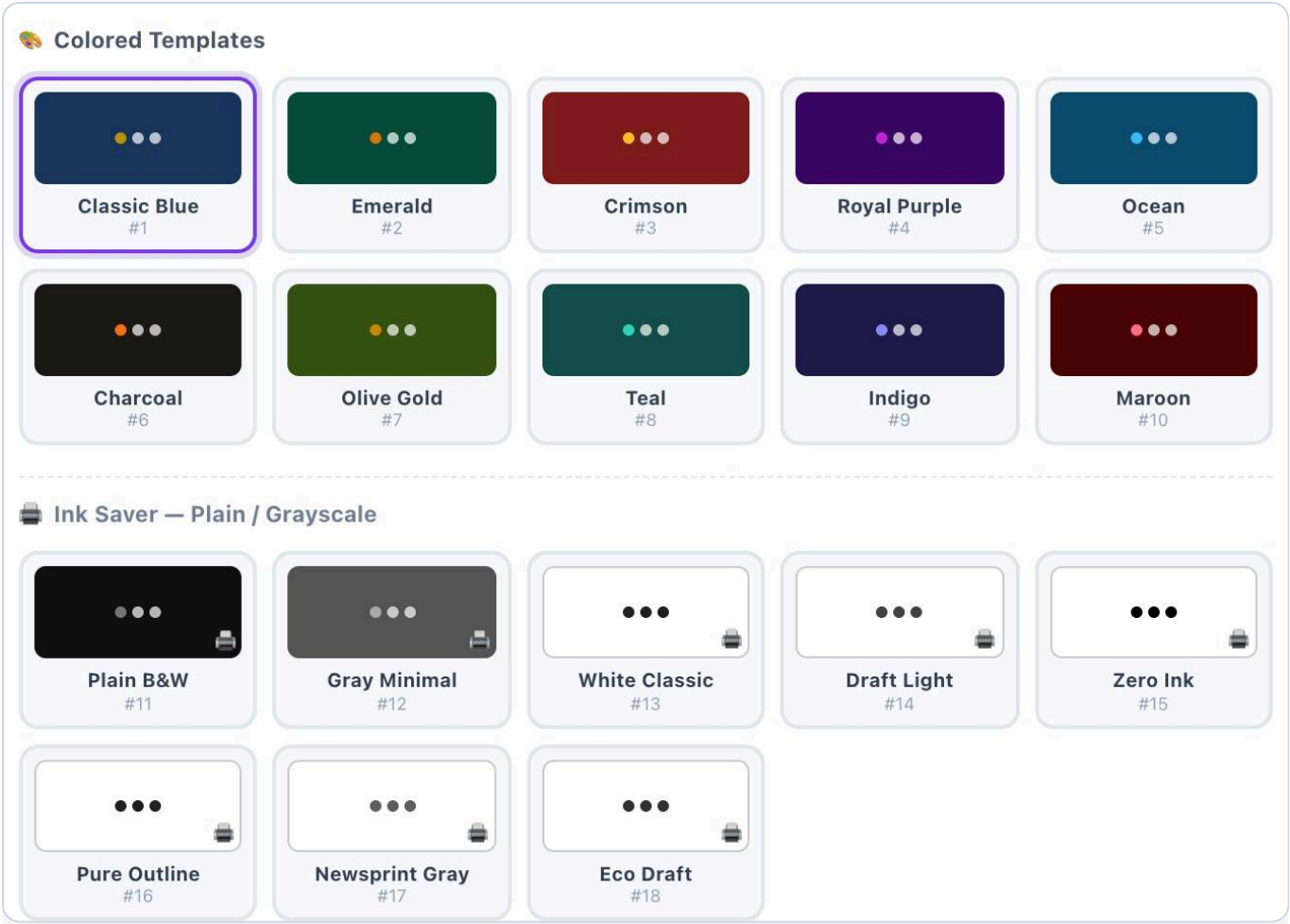


Figure 12: 10 coloured templates and 8 ink-saving templates

Customising the design

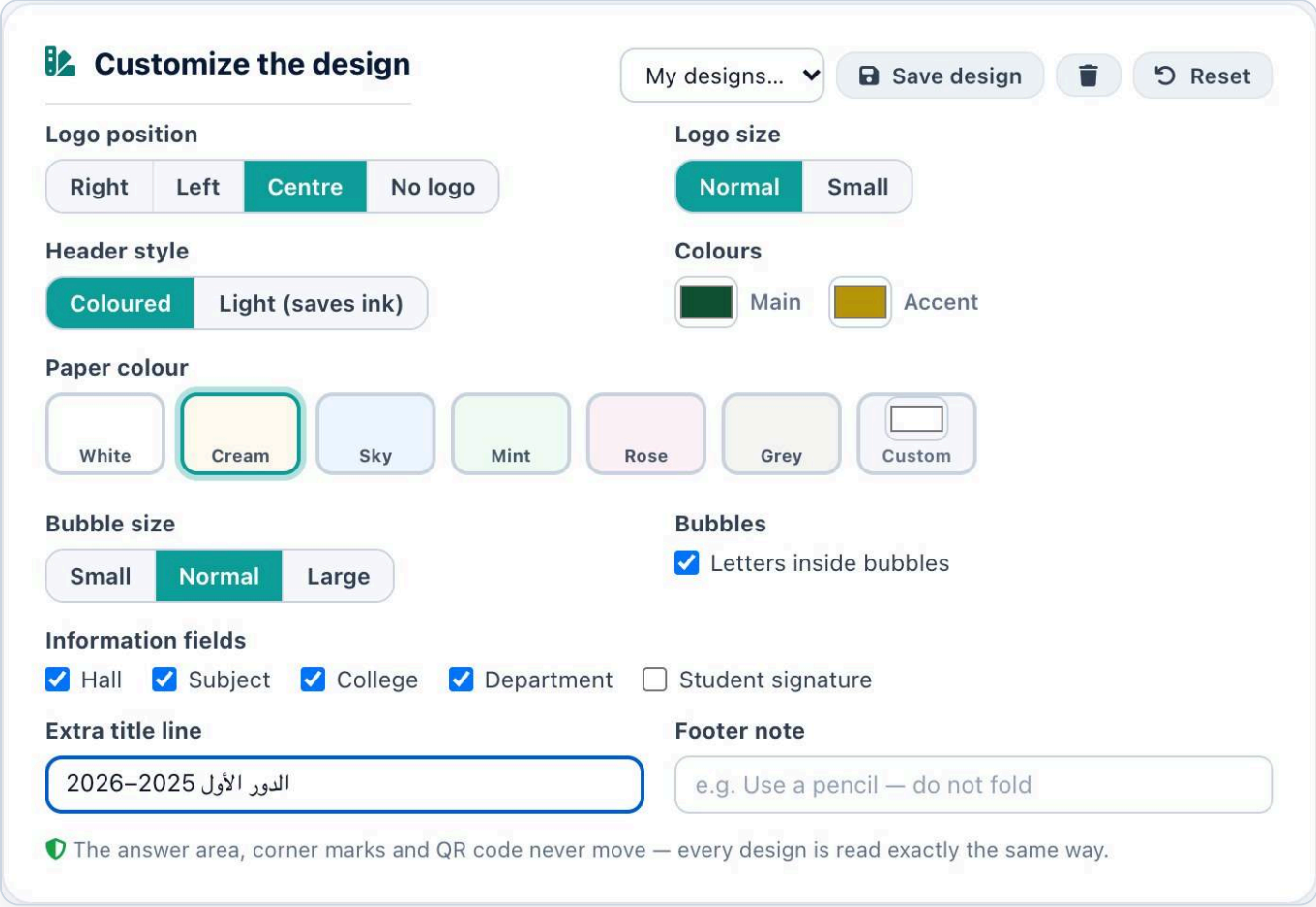


Figure 13: The sheet designer

Logo position and size	right, left, centre (logo in the middle, Arabic name right, English name left) or no logo; normal or small.
Header style	coloured, or light to save ink (coloured lines on white).
Colours	main and accent colour.
Paper colour	white, cream, sky, mint, rose, grey or a custom colour — light colours only; a dark colour is refused because it weakens reading.
Bubble size	small, normal, large. The program knows the printed size when grading.
Letters inside bubbles	can be hidden (true/false letters and numbers stay).
Information fields	hall, subject, college, department, student signature.
Extra title line / footer note	e.g. “First attempt 2025–2026” or “Use a pencil — do not fold”.
My designs	save a design by name and load it later; “Reset” returns to the template.

Note: The answer area, the four corner marks and the QR code never move in any design, so every design reads equally well.

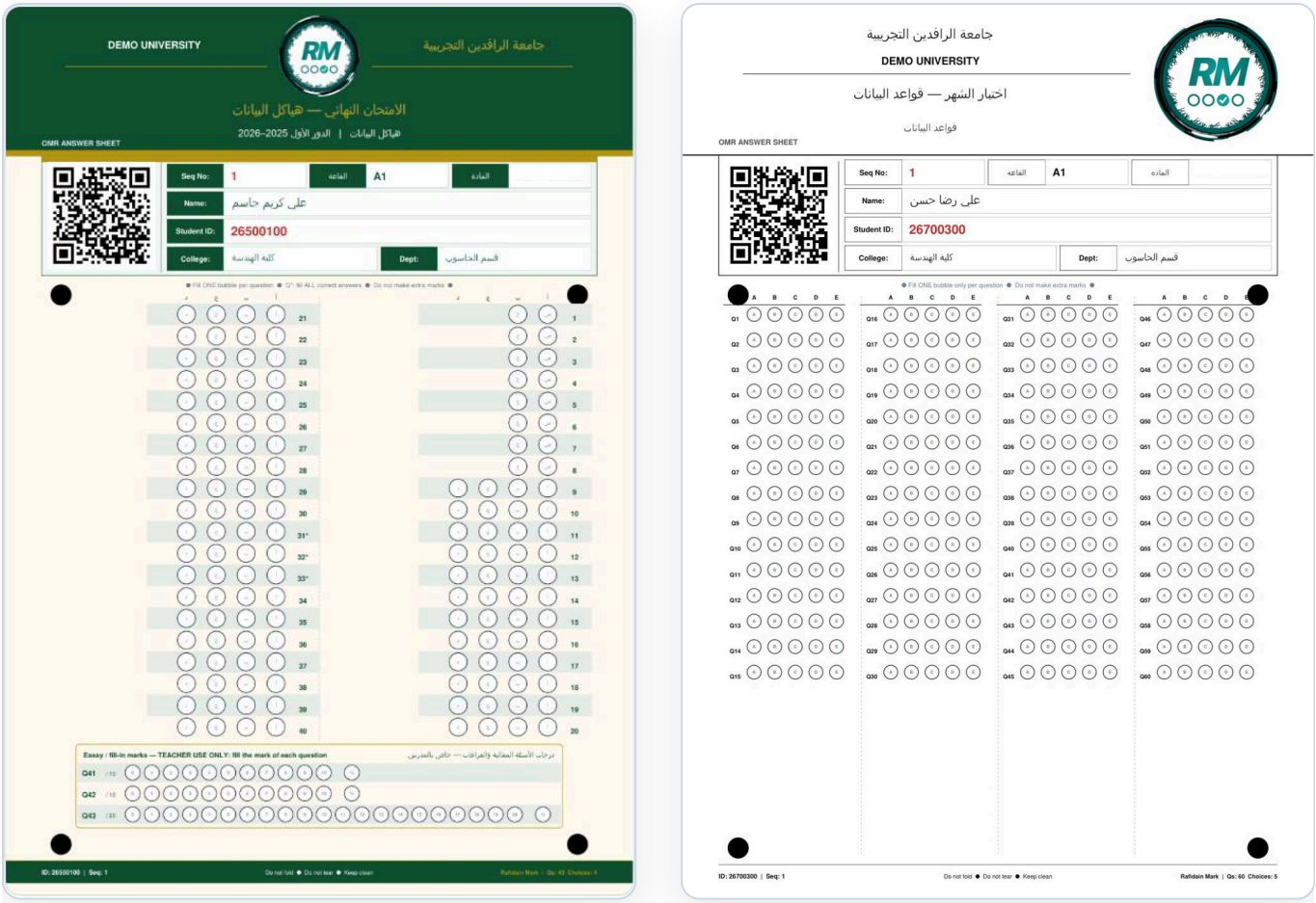


Figure 14: Left: the live preview — it is the real sheet (click to enlarge). Right: an ink-saving template with English letters.

The student list



Figure 15: Student list: one line per student, or import from Excel

One line per student: `seq,number,name,hall` — e.g. `1,26500100,Ali Kareem,A1`. **Import from Excel** reads a file with the columns Seq / Code / Name / Hall. One sheet is printed per student in list order, with a QR code carrying the number and name.

The printed sheet

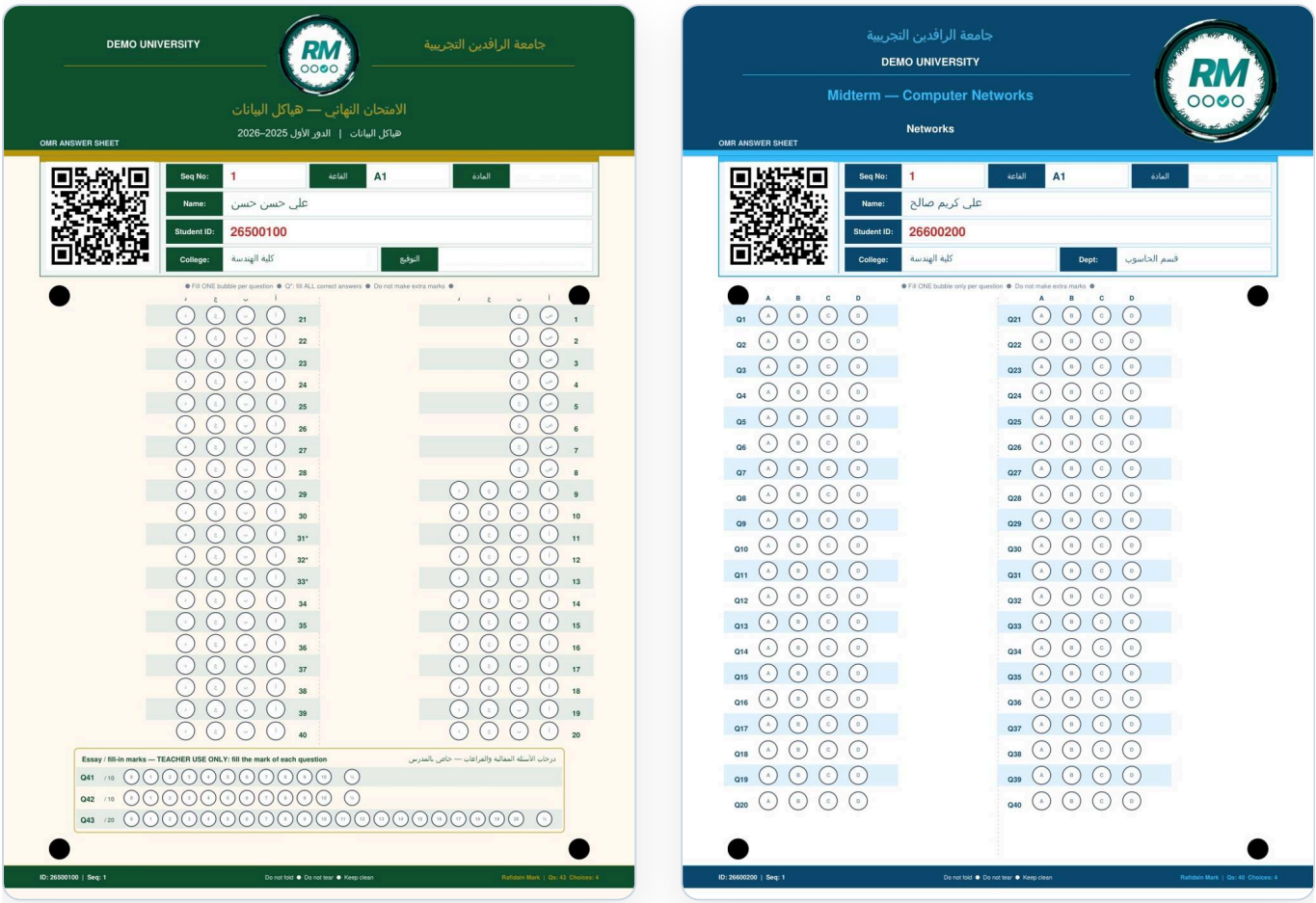


Figure 16: Two generated sheets: left — Arabic letters, true/false, multiple and essay questions, custom design; right — a plain exam with English letters.

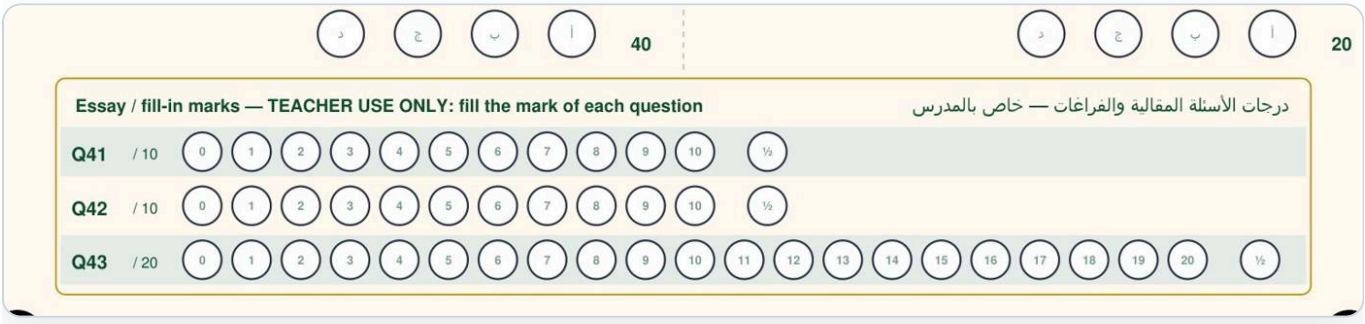


Figure 17: The essay-marks area (for the teacher): one row per question; marks above 20 use a tens row and a units row; plus a ½ bubble

Printing tips

- Print on A4 at actual size (100 %) — do not choose “Fit to page”.
- Never trim or cover the four black corner marks or the QR code.
- Photocopies are fine if they are clear and the same size.
- Each sheet carries the student’s name and number; hand them out by name.

6 Exam day and scanning

Instructions for students

- Fill the bubble completely with a dark pencil or a black/blue pen.
- One bubble per question, except questions marked with a star *: fill all correct answers.
- To change an answer, erase it well. A faint eraser trace is not counted.
- Do not write inside the answer area or on the corner marks, and do not fold the sheet.

Marks of essay and fill-in questions

The teacher marks essay answers in the answer booklet, then fills the mark in the “essay marks” area at the bottom of the sheet **before scanning**: one bubble for the mark, plus the ½ bubble for a half mark. Marks above 20 use the tens row and the units row (e.g. 37 = 30 + 7). A forgotten mark shows an “essay mark missing” warning and can be typed in on the edit screen.

Scanner settings

Resolution	200 to 300 dpi. 150 works, 200+ is better.
Colour	grey or colour (preferred). Pure black-and-white is fine if marks are dark.
Format	one PDF with all the sheets of the hall. Sheet order does not matter.
Orientation	does not matter: an upside-down sheet is turned automatically, and mild skew is corrected.

Note: In our tests with real scanning conditions (skew, 150 dpi, JPEG compression, shadow, light pencil, blue pen, eraser traces, stray marks, partial fills, crossed-out bubbles, upside-down sheets, poor copies) over 26,000 answers were read without an error, at about a tenth of a second per sheet.

Scanning with a phone (no scanner)

Without a scanner, photograph the sheets with the phone camera on the **Rafidain Mark scanner** page: hawa-alraafidayn.iq/scan — nothing to install. The phone sends the sheets as one PDF, and the program on the computer receives it and grades it like any scanner file.

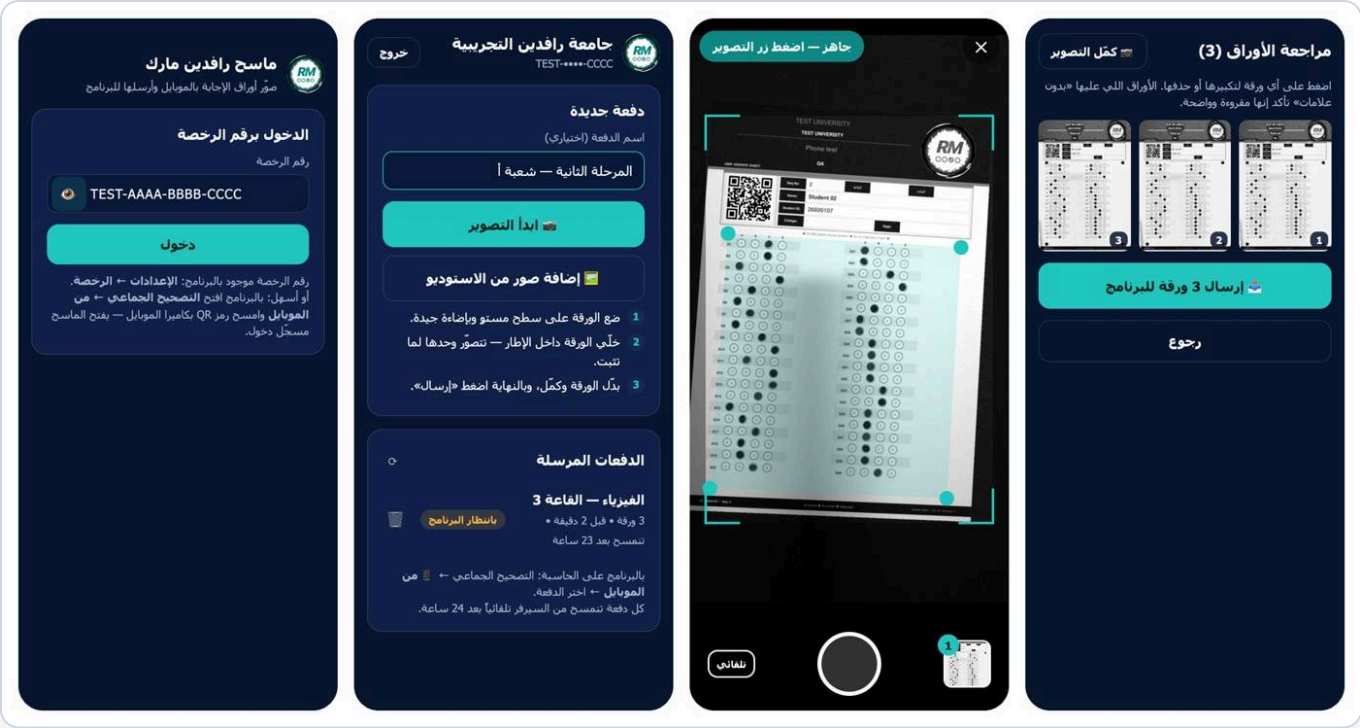


Figure 18: The phone scanner: sign in with the licence number → new batch → camera (the four corner marks light up) → review

1. In the program open **Bulk grading** → **From phone** and scan the QR code with the phone camera: the scanner opens signed in with your licence. Or open the link in the phone browser and type the **licence number** (from “Licence → Show number” in the program).
2. Type a batch name (e.g. the hall or section), tap **Start** and allow the camera.
3. Put the sheet on a flat surface inside the frame. When the four dots appear on the corner marks and the phone is steady, the sheet is captured by itself.
4. Change the sheet and continue. Finally tap the sheets thumbnail to review, then **Send**.
5. In the program: **Bulk grading** → **From phone** → choose the batch, then choose the exam and click **Grade all sheets**.



Figure 19: The “From phone” window: a QR code for quick sign-in; sent batches appear by themselves within seconds

- The program straightens the photo on the four corner marks and removes shadows, so the sheet reads like a scan.
- Captured sheets stay on the phone until they are sent, even if the page is closed.
- Every batch is deleted from the company server 24 hours after it was sent, and only the program activated with the same licence can see it.
- Sheets without corner marks (e.g. ministry sheets) are taken with the manual shutter, filling the frame, and graded with a custom template.

Tip: Best results: good light without hard shadows, the phone straight above the sheet, the sheet nearly filling the frame. For hundreds of sheets a scanner is still faster.

7 Bulk grading

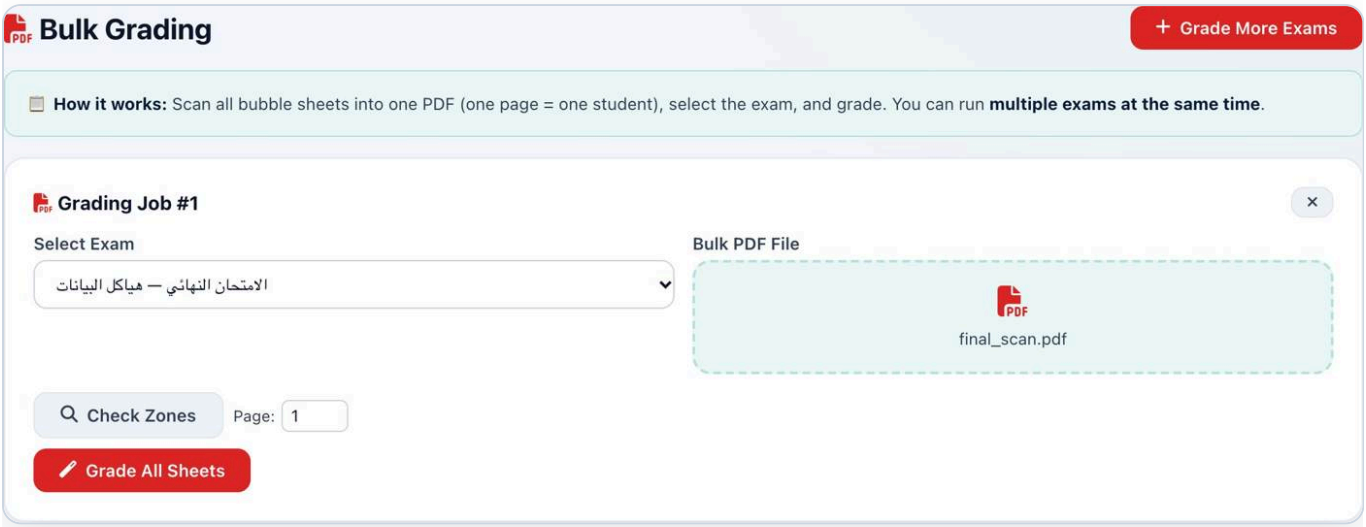


Figure 20: A grading job: choose the exam and the PDF, then start

1. In **Bulk PDF Grading** choose the exam and click to pick the PDF, or **From phone** for sheets photographed with a phone.
2. (Optional) click **Check zones** to see what will be read on any page.
3. Click **Start grading**. A progress bar appears; you can cancel at any time.
4. Results appear under the job. Add more jobs (more halls) and run them together.

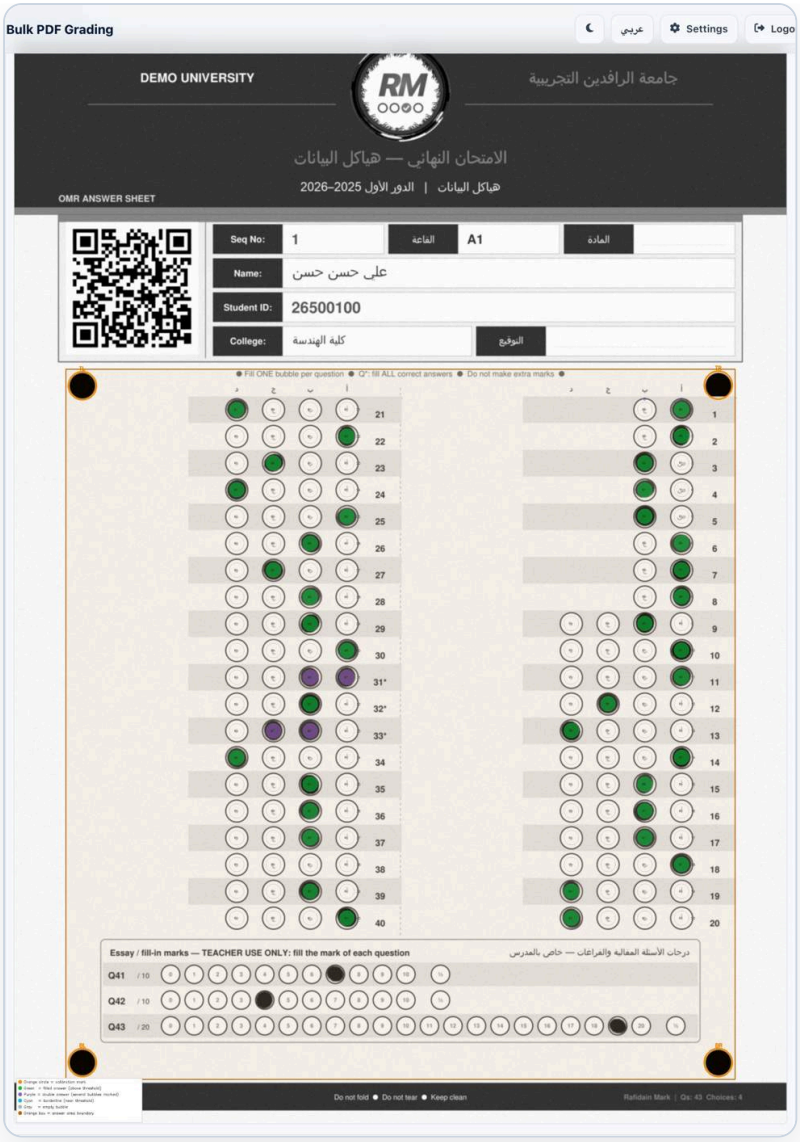


Figure 21: Check zones: green = filled, purple = double answer, cyan = borderline, grey = empty, with the fill % in each bubble

Result summary and student cards

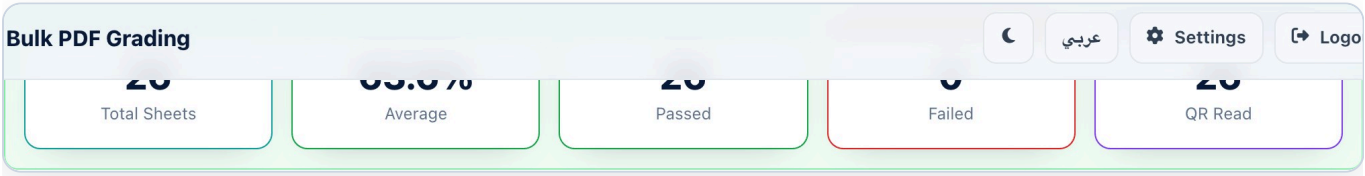


Figure 22: Job summary: sheets, average, passed, failed, QR codes read

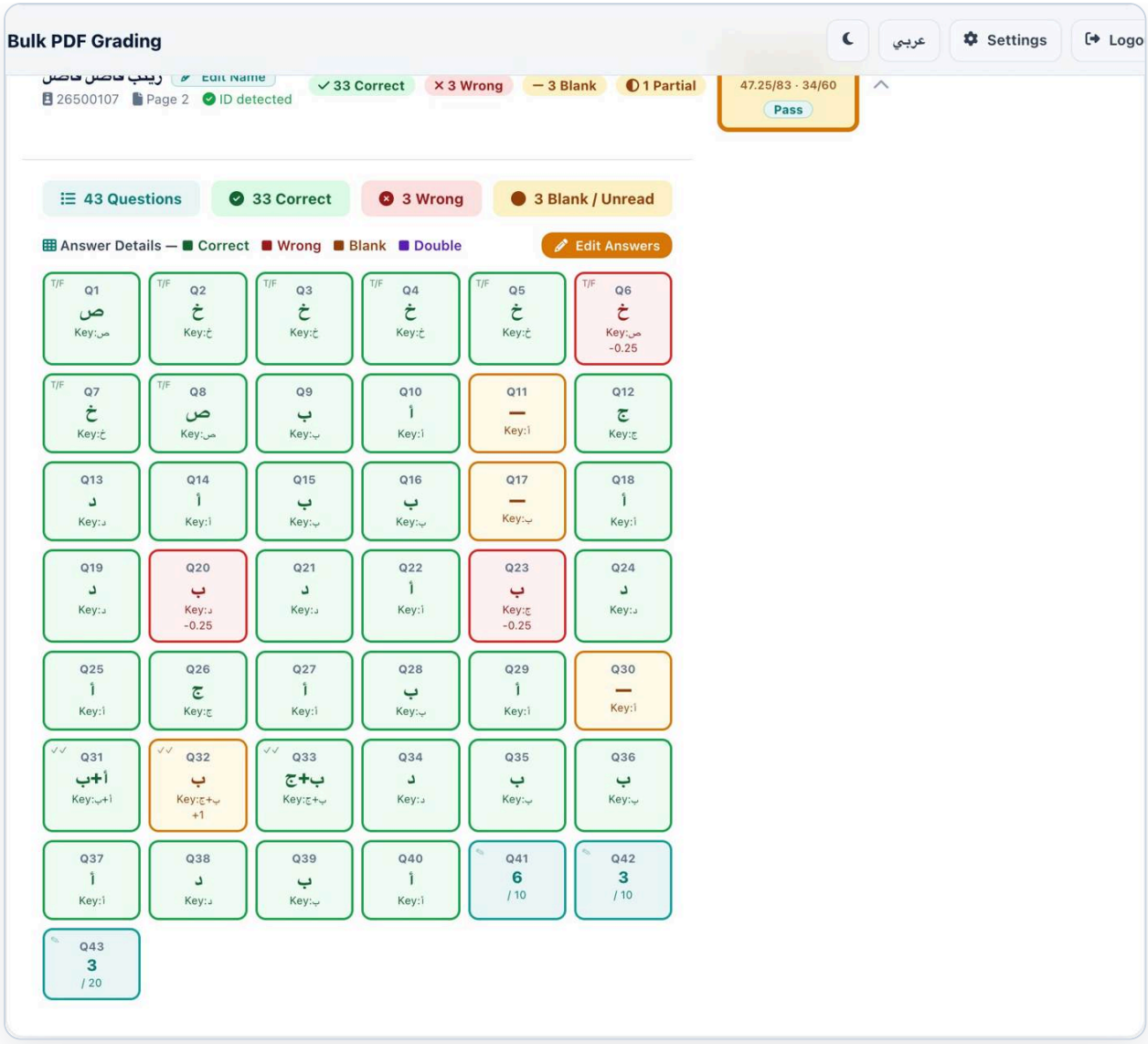


Figure 23: A student card: score, points, mark out of the total and grade, with every question coloured

Green	correct
Red	wrong (the penalty is shown, e.g. −0.25)
Yellow	blank, or partial credit on a multiple-answer question
Purple	double answer on a single-answer question
Blue	essay question and its mark (e.g. 7.5 / 10)
Grey	bonus or cancelled question
✎	answer corrected by hand

Correcting answers by hand

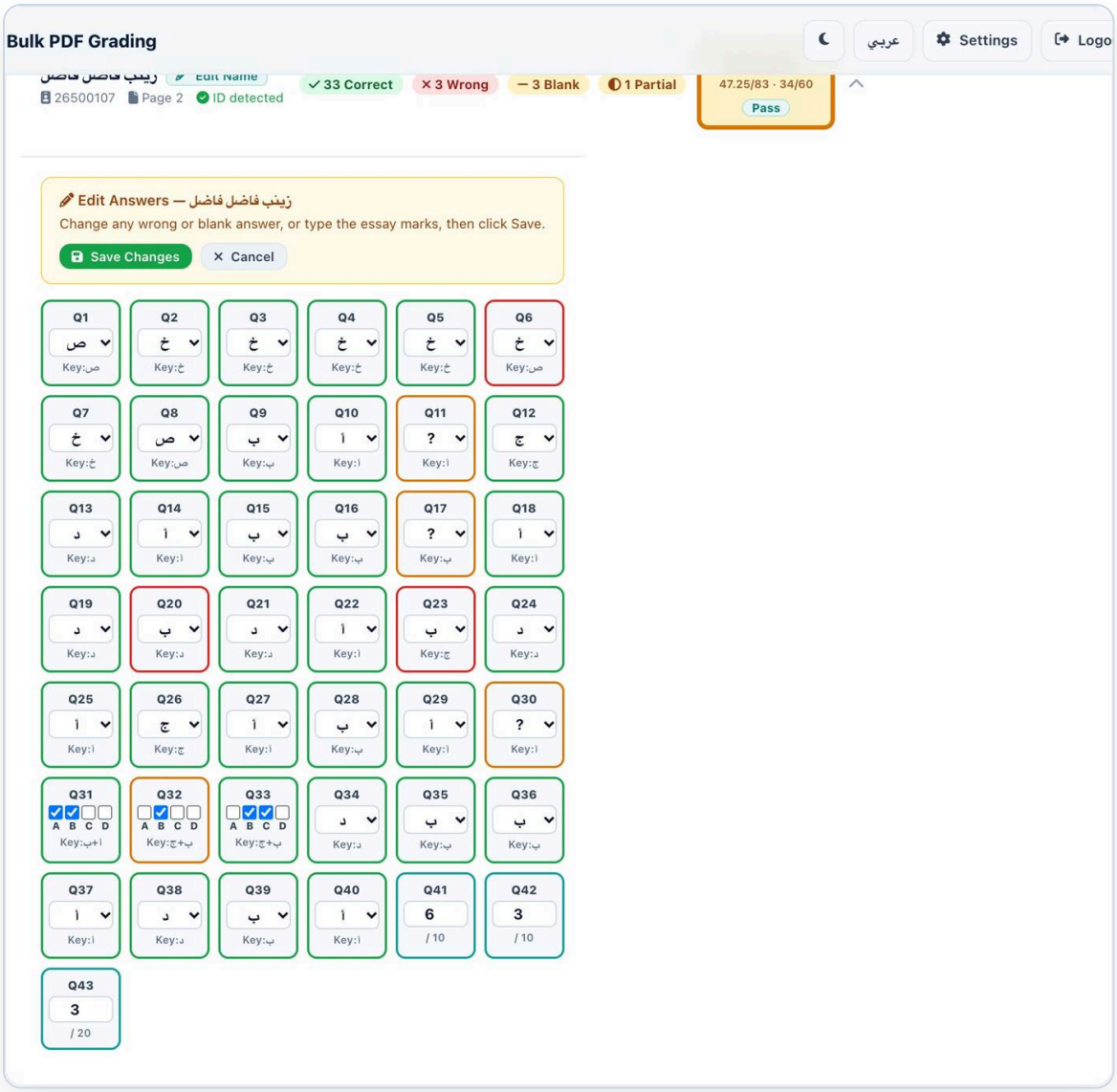


Figure 24: Edit mode: a list per question, check boxes for multiple answers and a number box for essays

Click **Edit answers**, change what you need and click **Save changes**. The correction is saved at once with a "from → to" record, and the student's score, the session summary, the exports and the analysis are updated.

Warnings

Two answers in N questions	more than one bubble on a single-answer question — review it.
Essay mark missing	an essay mark was not filled — type it in edit mode.
No name / ID not found	the QR code could not be read — use "Edit name".
Empty / unreadable sheet	nothing was read: the sheet is empty or the PDF page is damaged — check it and rescan.

8 Grading a single sheet

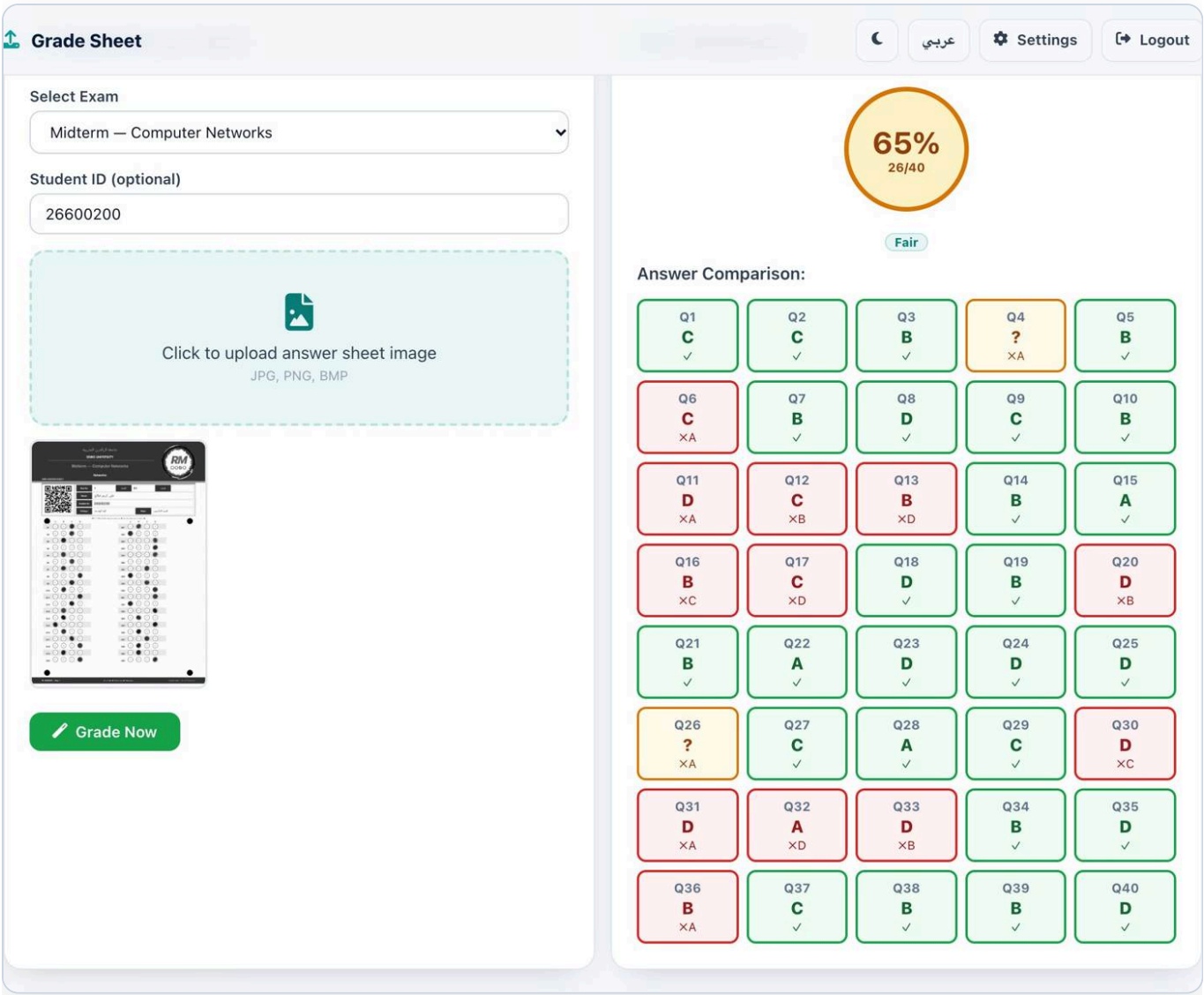


Figure 25: Grading one sheet from an image

In **Grade Sheet**: choose the exam, type the student number (optional), pick the sheet image (JPG, PNG or BMP) and click **Grade now**. The score and a question-by-question comparison appear. Useful for a late sheet or re-checking one sheet.

9 Custom templates

A custom template tells the program where the bubbles are on a sheet it **did not print** — ministry sheets or a department's old sheet. You draw the zones once on an image of the blank sheet and reuse the template for every exam.

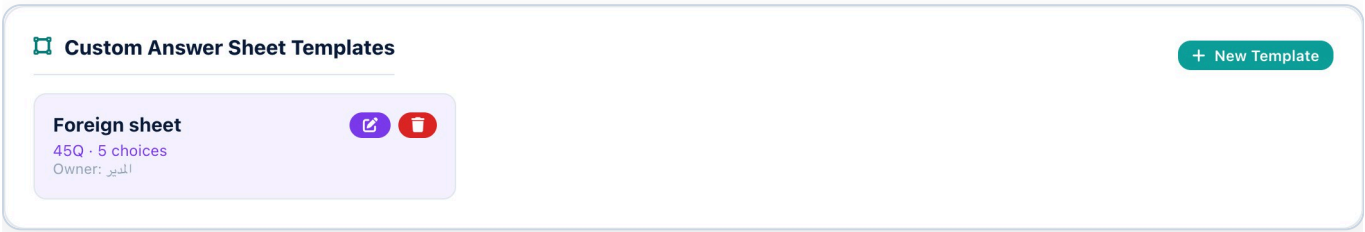


Figure 26: The list of custom templates

Creating a template

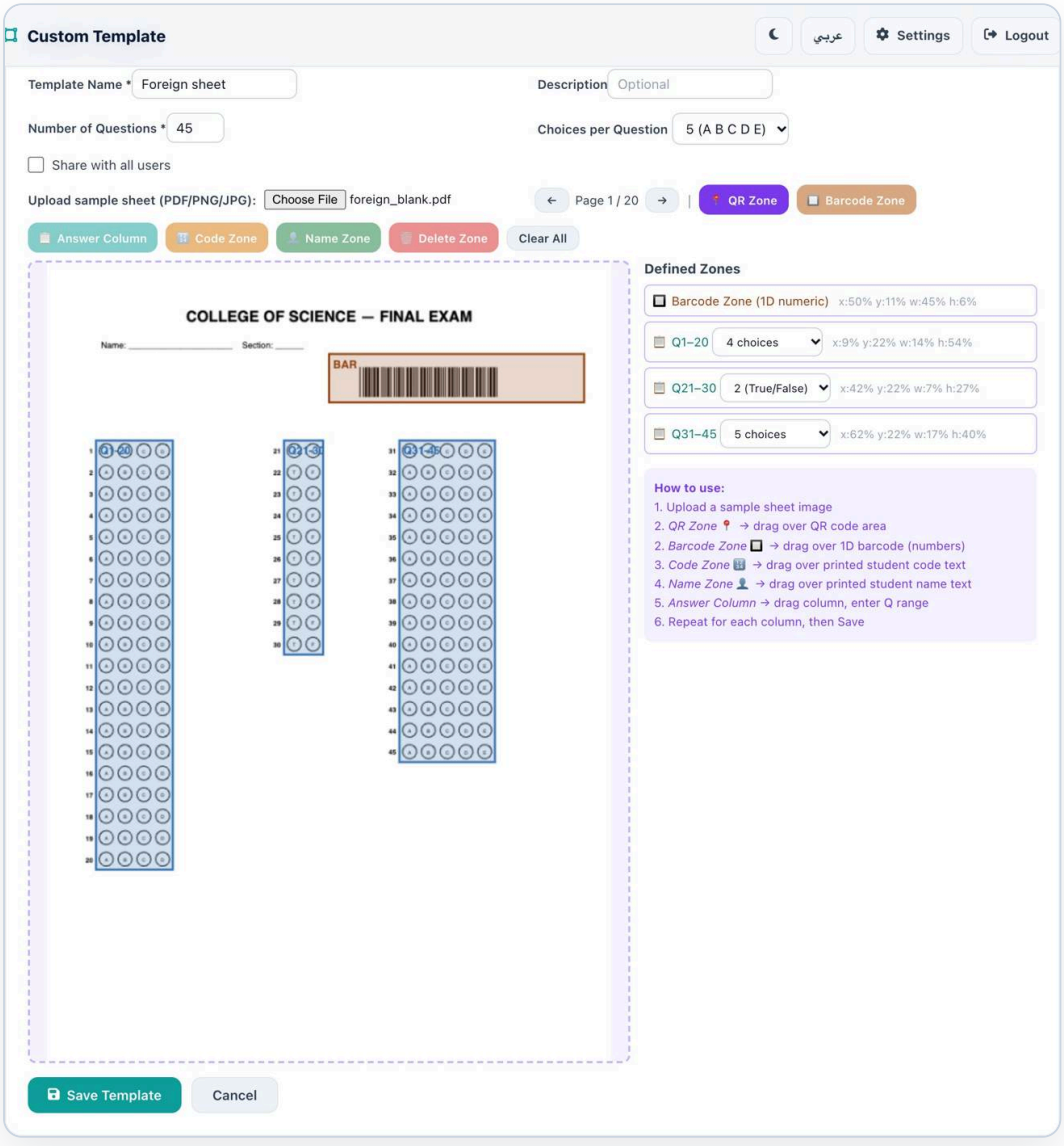


Figure 27: The template editor: zone tools and the zones drawn on the sheet

1. Click **New template** and type the name, number of questions and choices.
2. Upload an image or PDF of a blank (or scanned) sheet of this kind.
3. Choose a tool and drag a rectangle on the sheet:
4. **Answer column**: draw a rectangle around that column's bubbles only (not the question numbers) and type its range, e.g. `1-20`. Repeat for every column.
5. In the zone list choose the **bubbles per question** of each zone: 2 (true/false), 3, 4 or 5 — zones may differ.
6. (Optional) a **QR zone** or **barcode zone** for the student number, or a **student-number zone** and **name zone** for reading printed text.
7. Click **Save template**.

> **Tip:** The program looks for the printed bubbles in and around each zone, so the drawing need not be exact — but never let one zone cover two columns.

Grading with a template

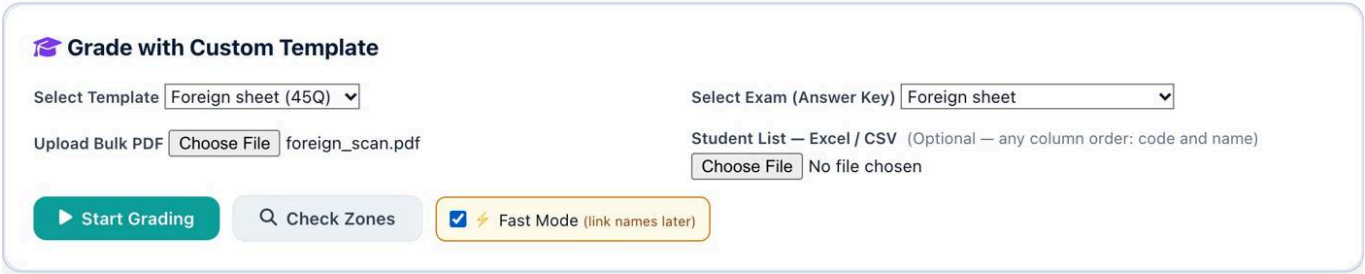


Figure 28: Grading with a custom template

1. Choose the template, the exam (key and types come from the exam) and the PDF.
2. (Optional) upload a **student list** (Excel or CSV) with a number column and a name column in any order — the columns are recognised automatically.
3. Click **Check zones** to verify, then **Start grading**.

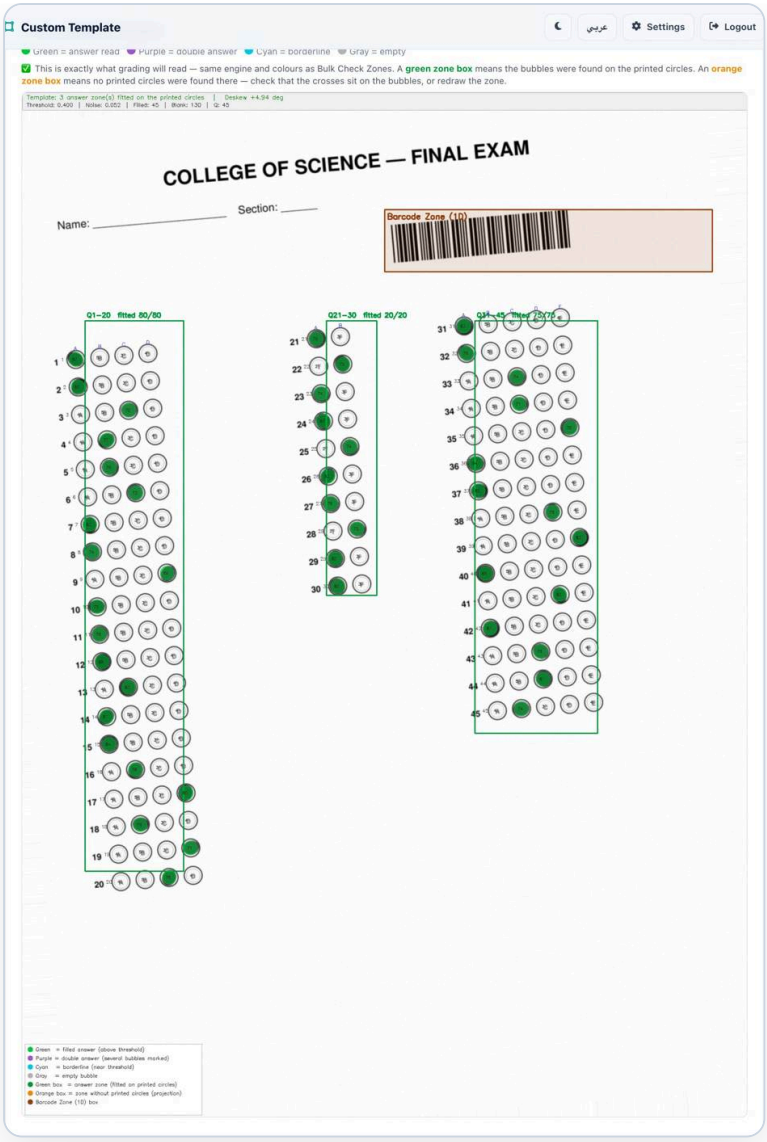


Figure 29: Checking the zones on a custom-template sheet

Fast mode and matching by order

Fast mode reads only the drawn barcode or QR zone (no page-wide search, no handwritten names) and matches the number to the student list if you upload one. If some sheets have no number, **Match by Excel order** appears: sheet N takes row N of the list — for sheets scanned in list order. Normal mode also searches the whole page at a higher resolution, tolerating one extra or missing digit.

10 Results and exports

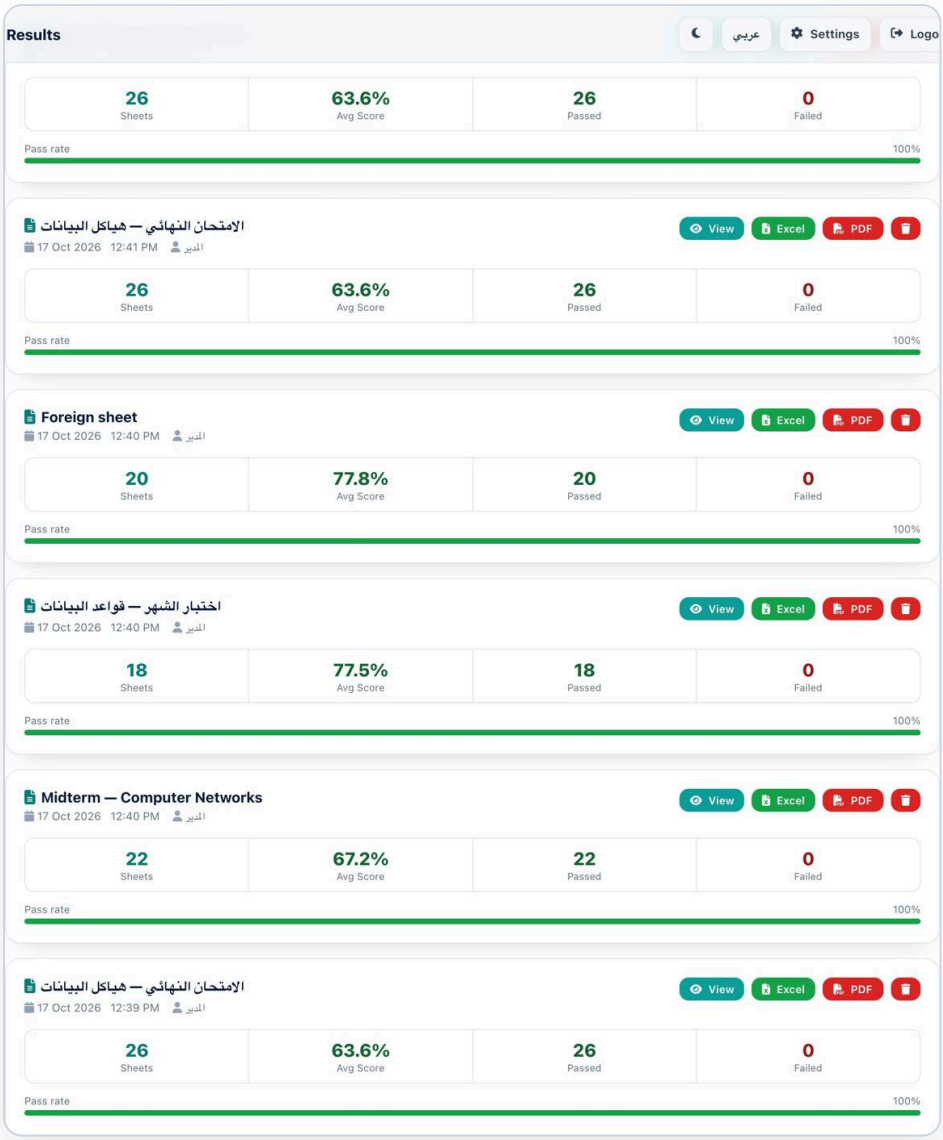


Figure 30: Grading sessions: every graded file is a session

Each session has **View**, **Excel**, a **PDF** report and **Delete**.

Session details and review

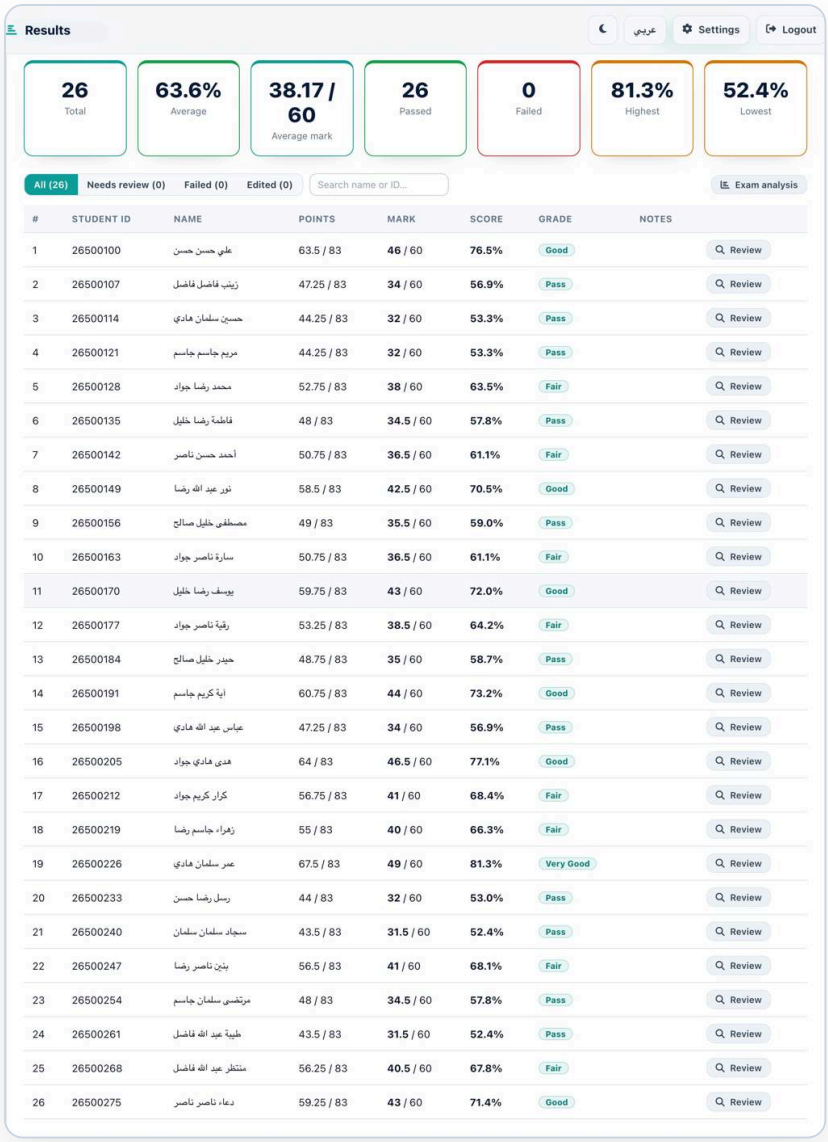


Figure 31: Session details: statistics and the marks table with notes

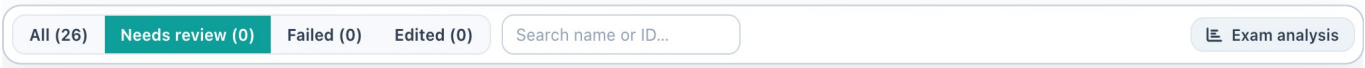


Figure 32: Filters: all, needs review, failed, edited — and search by name or number

The table shows points, the mark out of the exam total, the percentage, the grade and notes. **Review** opens the student's card under the row for direct editing. The **Needs review** filter gathers sheets with double answers, missing essay marks, no name, or empty/damaged pages.

The Excel file

Grades	seq, number, name, points, mark out of the total, percent, grade, result, rank, right/wrong/blank, double answers, number of corrections
Answers	students × questions matrix, with the key on the first row (in the sheet's letters)

Question analysis	per question: type, key, points, % correct, discrimination, point-biserial, how many chose each letter, blank, double, notes
Statistics	mean, median, SD, lowest, highest, pass rate, reliability, grade and score distributions
Manual corrections	every correction: student, question, what the scanner read and what it was changed to (when there are any)
Marks for upload	three columns only: number, name, mark — ready for the college system

Tip: With the Arabic interface the Excel file has Arabic headings and right-to-left sheets.

The PDF report

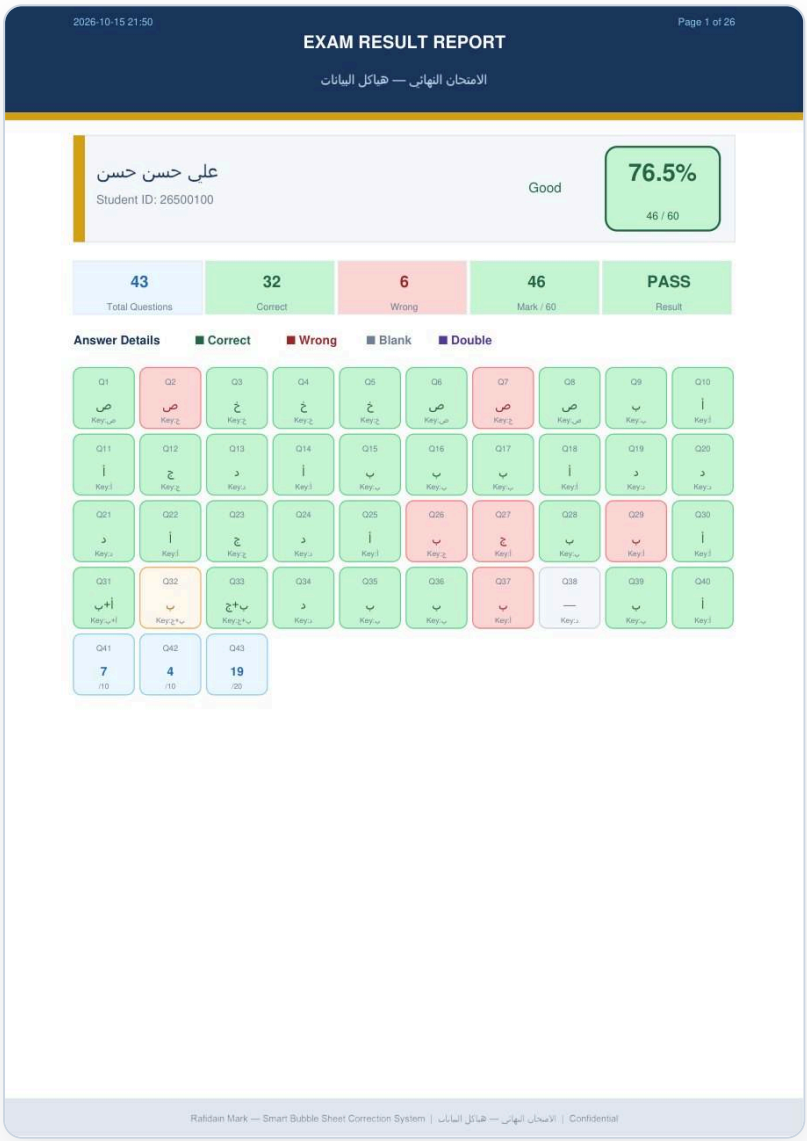


Figure 33: PDF report: one page per student with score, grade and every answer

11 Exam analysis

Click **Exam analysis** in the job results or in the session details.

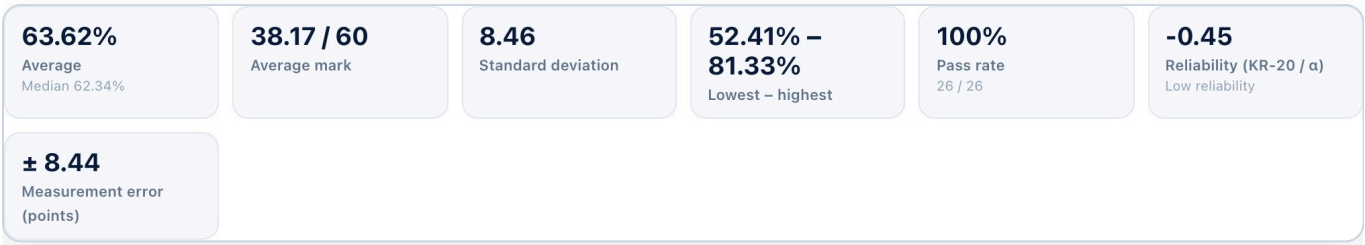


Figure 34: Exam summary

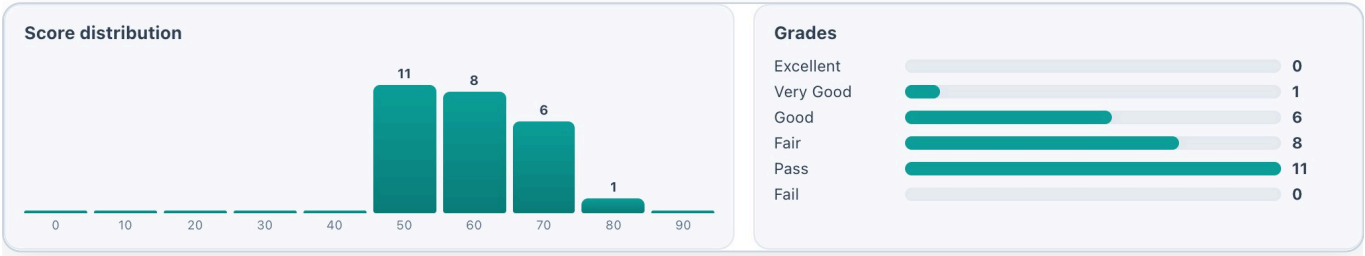


Figure 35: Score distribution and grade distribution

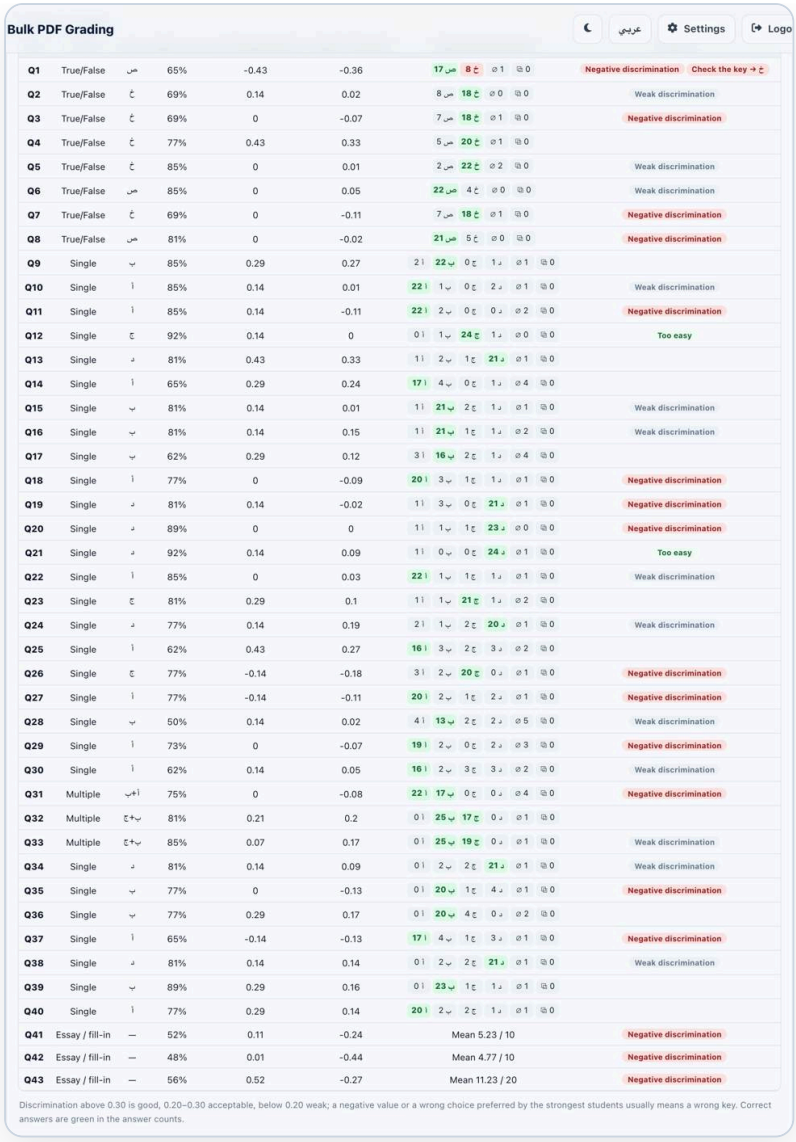


Figure 36: Question analysis: the key in green, a suspicious distractor in red

Correct (difficulty)	share of students who answered correctly. Above 90 % “too easy”, below 25 % “hard”.
Discrimination	% correct in the top 27 % minus the bottom 27 %. Above 0.30 good, 0.20–0.30 acceptable, below 0.20 weak, negative is a problem.
Point-biserial	correlation of the question with the rest of the student’s score (corrected). Negative means strong students get it wrong.
Answers chosen	how many students chose each letter. A distractor nobody chooses does not work.
Check the key → X	a wrong choice preferred by the strongest students over the key — the key is probably wrong and X is right.
Reliability (KR-20 / α)	how consistent the exam is: above 0.8 very high, 0.7 good, 0.5 acceptable.

Measurement error	the approximate ± range a student's score might move if the exam were repeated.

Tip: If "Check the key" appears: fix the key in **Edit key** and accept the re-scoring, or make the question "Bonus" or "Cancelled" if it is faulty.

12 Overall statistics

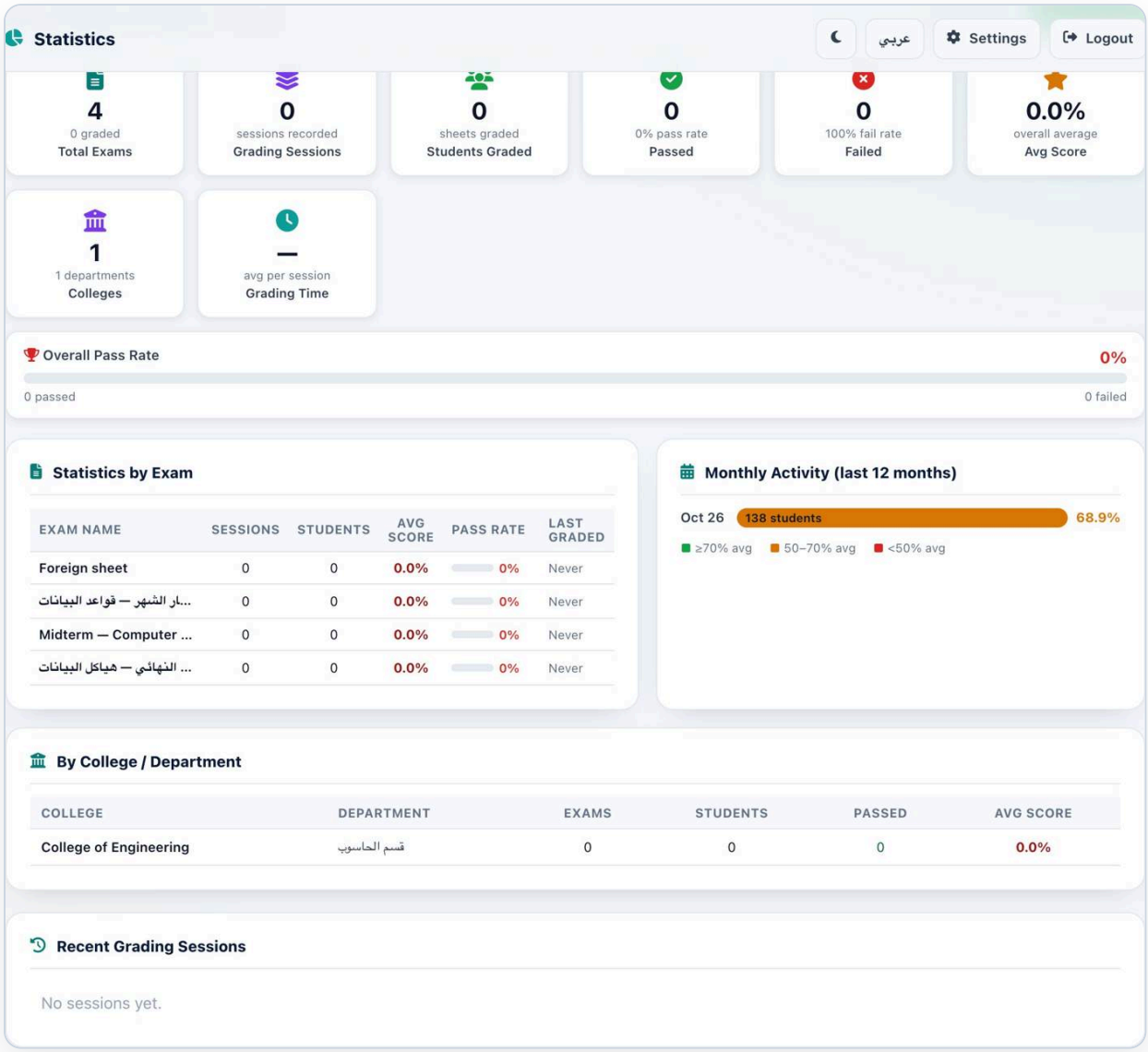


Figure 37: Statistics: overview, by exam and monthly activity

Shows exams, sessions, sheets, pass rates and averages by exam and by college (administrator), activity over the last 12 months, a filter for large sessions (50+ students) and an Excel export.

13 Users and permissions



Figure 38: User management (administrator)

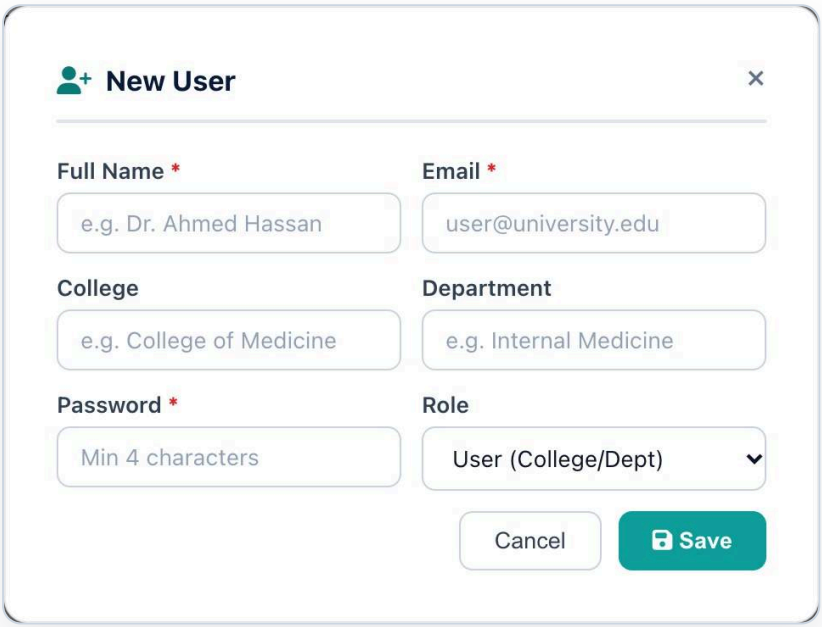


Figure 39: Adding a user

Administrator	sees all exams and results, manages users, changes the sheet logo and installs updates.
User (teacher)	sees only their own exams and results, and can use shared templates.

14 Settings and licence

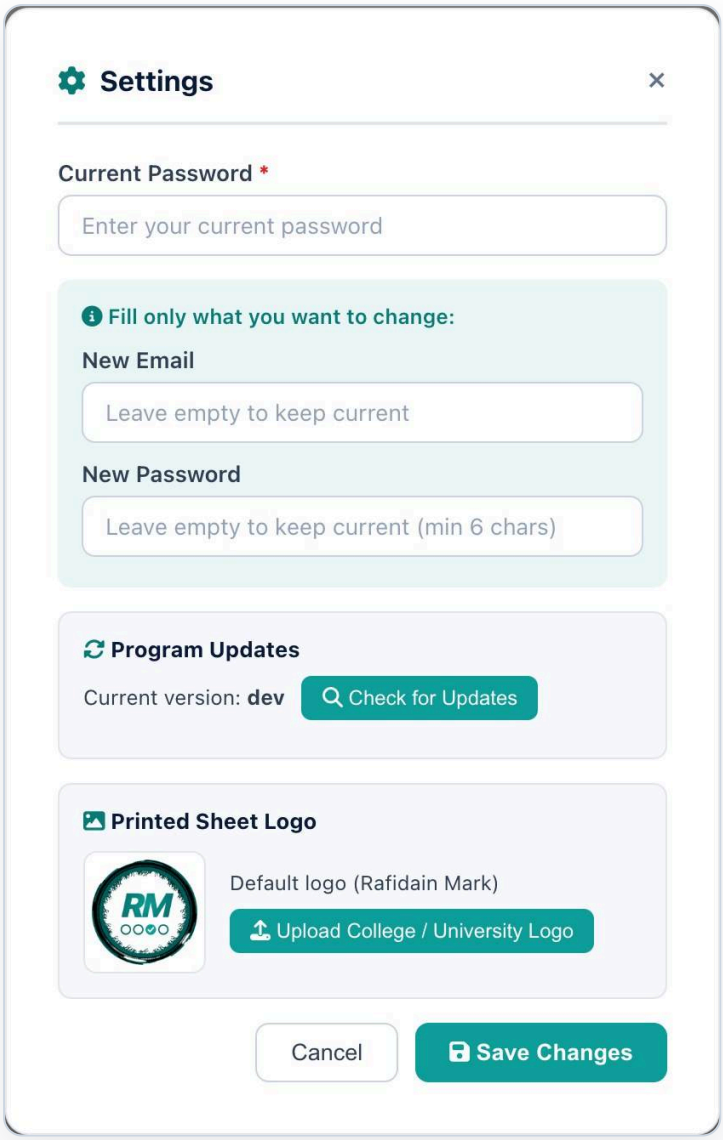


Figure 40: Settings: account, updates, sheet logo

- **Account**: enter the current password, then the new e-mail or password.
- **Updates**: the current version and a button to check for updates.
- **Sheet logo** (administrator): upload the college or university logo (PNG or JPG), or “Default”.

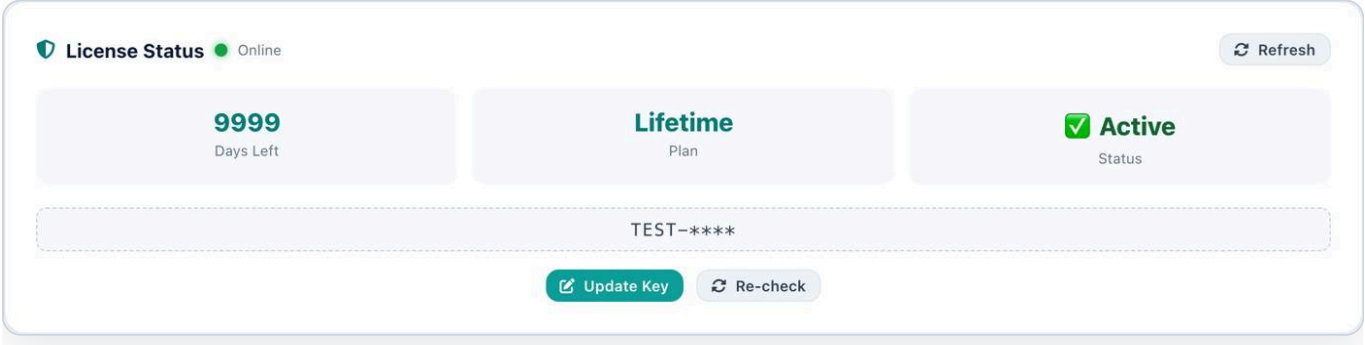


Figure 41: Licence status

15 How marks are calculated

- **Percent** = (points earned ÷ points of the counted questions) × 100.
- **Mark** = percent × exam total ÷ 100, then the chosen rounding.
- A wrong or double answer: zero, or minus the penalty. A blank: always zero. The final total never goes below zero.
- Multiple answers (K required, the student chose R right and W wrong): all or nothing = full only on an exact match; partial = (R − W) ÷ K; partial-zero-if-wrong = R ÷ K when W = 0; any correct = full when R ≥ 1 and W = 0.
- Essay: the filled mark (never above its maximum). Bonus: full for everyone. Cancelled: not counted.

Example

Q1 single (1)	correct	+1
Q2 true/false (1)	wrong, ¼ penalty	−0.25
Q3 multiple A+C (2), partial	chose A only	+1
Q4 essay out of 10	teacher filled 7.5	+7.5
Q5 cancelled	—	not counted
Total	9.25 of 14 points	66.07 % = 39.64 of 60 → rounded to 0.5: 39.5

16 Troubleshooting and FAQ

The browser does not open	open `http://localhost:8833` yourself, or use the tray icon → Open.
“Empty / unreadable” sheets	the PDF has damaged pages or blank sheets. Check the file and rescan those sheets.
A name is missing	the QR code is damaged or covered. Use “Edit name”; with custom templates upload the student list.
Many wrong readings on one sheet	make sure it was printed at 100 % and the corner marks are visible. Use “Check zones”.
Very light marks are not read	scan at 300 dpi in grey and ask students to fill darker.
I changed the key after grading	accept “Re-score” — no rescanning needed.
The exam sheet is not ours	use a custom template (chapter 9).
A question had a typo	make it “Bonus” or “Cancelled” and re-score.
I need more than 200 questions	split the exam into two exams (two sheets).
Administrator password forgotten	contact technical support.

Technical support

Hawa Al-Rafidain (Airmax) — **hawa-alraafidayn.iq**