PraktiFin Derivatives: User Guide

Nov 25, 2026 · @FAHMI RAHIM

PraktiFin Derivatives is a free, self-marking practice app for Malaysian futures. Open it at https://fahmirahim0.github.io/praktifin/derivatives/ on a laptop, iPad or phone.

What PraktiFin Derivatives is

You read a trading scenario, work it out on paper with the step method, type your key answers, and the app marks them and shows the full worked answer. It is for university students, lecturers and anyone learning how Malaysian futures are used.

What you get	Detail
Contracts	FCPO, FKLI, FKLM, FKB3, FMG5 and SSF
Strategies	Hedging, speculation, spreading and arbitrage (FMG5 has no arbitrage), plus the FKLI inter-market spread
Question sets	24 sets, each with 10 bank questions, then new questions made for you with fresh numbers, so you never run out
Marks	Every question is out of 10, marked on your first check
Cost and sign-up	Free. No account and no download; your progress stays in your own browser
Internet	Needed to open it the first time; once installed as an app it also works offline

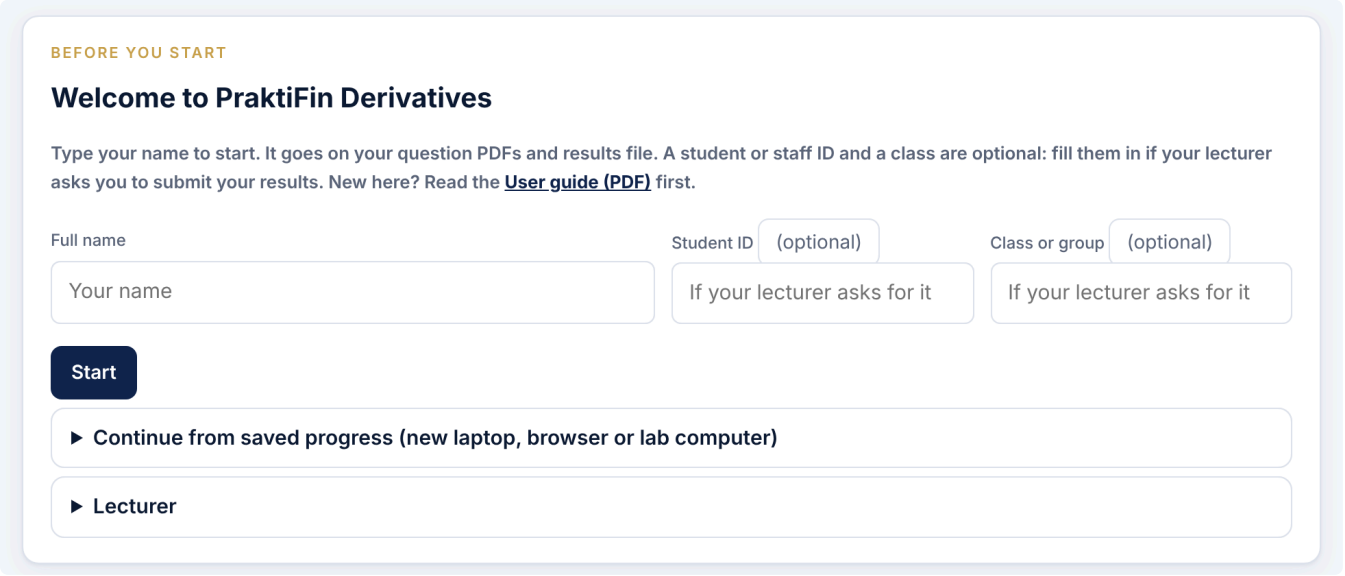
All companies, traders and prices in the scenarios are fictional and for practice only.

Getting started

Open **https://fahmirahim0.github.io/praktifin/derivatives/** in Chrome, Safari or Edge. A laptop is best for the wide marked-to-market tables, but an iPad or phone works too.

1. **Type your name.** The first screen asks for your name, which goes on your question PDFs and results file. **Student ID** and **Class or group** are optional: fill them in only if your lecturer asks you to submit your results.

2. **Press Start.** The app remembers you on that browser. Press *Edit* in the bar at the top to change your details.
3. **Choose a contract and a strategy.** Your first question in every set is the easiest one. After that, the app chooses your questions for you (see *How the app picks your next question*).



The first screen also has **Continue from saved progress**, for when you move to a new laptop or browser, and **Lecturer**, which opens the questions without a name for teaching in class.

Install it as an app (optional)

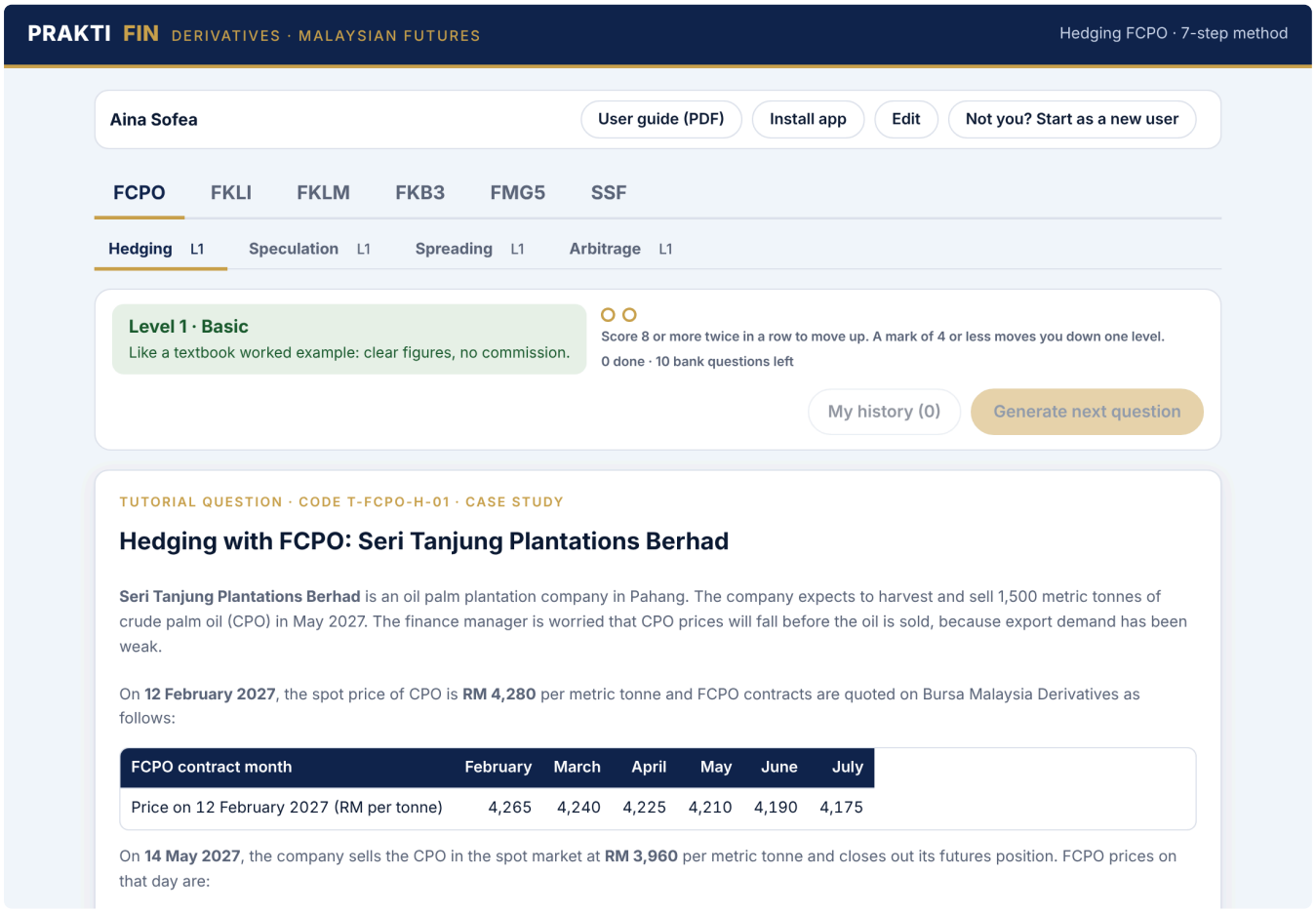
You can put PraktiFin Derivatives on your home screen like any other app. It then opens from its own icon, full screen, and keeps working when the internet is slow or off. Press **Install app** in the bar with your name to see the steps for your device.

- **iPad or iPhone:** open the link in **Safari**, tap **Share** (the square with an arrow pointing up), then **Add to Home Screen** and **Add**.
- **Android:** open the link in **Chrome**, tap the menu (three dots) and choose **Install app** or **Add to Home screen**.
- **Laptop:** in **Chrome** or **Edge**, click the install icon at the right end of the address bar, or choose **Install** from the browser menu.

Important on iPad and iPhone: the home-screen app keeps its own storage, separate from Safari. Before you switch, press **Save progress** in Safari, then open the new app and use **Continue from saved progress**.

The screen

The page reads from top to bottom: check your level, read the question, answer it, then check.



Part of the screen	What it does
Bar with your name (very top)	User guide, Install app, Edit, and *Not you?* for a shared computer (it clears that browser for a new user)
Contract tabs	FCPO, FKLI, FKLM, FKB3, FMG5, SSF
Strategy tabs	Hedging, Speculation, Spreading, Arbitrage (and Inter-market for FKLI), with your level in each (L1, L2 or L3)
Level panel	Your level, how close you are to the next level, how many bank questions are left, *My history* and *Generate next question*

Part of the screen	What it does
Question card	The scenario, its code (for example T-FKLI-H-03 from the bank or T-FKLI-H-G2-48213 for a new question), plus *Download question (PDF)* and *Print question*
Your answers	The boxes you fill in, then *Check my answers*
Full worked answer	Appears after you finish checking
My tutorial results	Your marks, Save and Load progress, and Copy or Download results

Scenarios come in eight forms: case study, email, chat messages, news clipping, broker screen, meeting minutes, phone call transcript and analyst note. In some, prices sit in a table; in others they are hidden in the text. Read the whole document and pick out what you need, as you would at work.

How the app picks your next question

PraktiFin works like a gym coach: it starts you on a light weight, adds weight when you lift it well, and takes some off when you struggle. There is one button, **Generate next question**, and the app decides what comes next from your first-try mark.

Level	What the questions are like
Level 1 · Basic	Like a textbook worked example: clear figures in tables, no commission, the hedge or spread works in your favour
Level 2 · Intermediate	Adds brokerage commission, margin calls and longer documents where you pick out the right figures
Level 3 · Challenging	Futures losses, spreads that lose, no-arbitrage cases, two or more margin calls, and figures hidden in emails, chats and news

- **8 or more twice in a row:** you move up one level.
- **4 or less:** you move down one level. Study the full worked answer before you go on.
- **5 to 7:** you stay at the same level.

You get the bank questions at your level first. When none are left, the app makes a new question with fresh numbers, checked by the same calculation engine. Each strategy in each contract keeps its own level, so you can be at Level 3 in FCPO hedging and Level 1 in FKB3 arbitrage.

Answering, checking and marks

Work the full steps on paper or in Excel first, then type only the key results. The app checks your results; your paper shows your method.

Answer type	How to answer	Example
Choice	Click one button	Short hedge or Long hedge
Number	Type the figure	60 contracts
Multiple choice (A to D)	Click the option that matches your table	Open position: Sell 60 May FCPO at RM 4,210
Direction + amount	Click the direction, then type the amount with no minus sign	Loss, then 280800
Marked-to-market table	Fill every cell for every day	DPL Day 3: -12,500

Day	Price	DPL	IM	BM	MM	CM	VM
0	1,532	0	TIM (Q2)	-	TMM (Q3)	-	40000
1	1,519.50	-5000	-	35000	TMM (Q3)	0	35000
2	1,500.50	-7600	-	27400	TMM (Q3)	12600	40000
3	1,493	-3000	-	99999	TMM (Q3)	0	37000
4	1,506.50	5400	-	42400	TMM (Q3)	0	42400
5	1,525	7400	-	49800	TMM (Q3)	0	49800

Tips for typing numbers:

- Commas and "RM" are fine: 397,500 and RM 397500 are both accepted.
- Amounts are accepted within RM 1 of the answer. Percentages are accepted within 0.02, and effective prices, rates and fair values within 0.05 or less.
- Outside the table, never type a minus sign: choose Loss, Cash outflow or Decrease instead.

- Inside the marked-to-market table, write a loss with a minus sign (-12,500) or in brackets ((12,500)). Type 0 in the CM column when there is no margin call.
- Basis points in spreading can be negative: type them with a minus sign.
- In arbitrage, if there is no executable arbitrage, choose the "No transaction" boxes and enter 0 for every amount.

Checking

Your mark is your score on the **first** press of *Check my answers*. The second try is for learning, not for marks.

1. Every answer turns green (correct) or red (not correct). The marked-to-market table scores one mark for each fully correct column (DPL, BM, CM, VM), and each arbitrage table box is worth 0.5.
2. If you scored less than 10, fix the red boxes and press *Check again*, or press *Show full answer*.
3. The full worked answer then appears, with the correct figure under every wrong box. Compare it line by line with your paper.

Why was I wrong?

Under every wrong answer there is a **Why was I wrong?** box that names the most likely mistake: a reversed direction, a figure from another step, commission forgotten or deducted twice, one contract out (contracts are always rounded down), the wrong contract month, or the first wrong cell in the marked-to-market table with its formula. During your second try it explains without giving the answer; after you finish, it shows the correct figure too.

Discuss it with a free AI tutor

After you finish a question, press **Copy for AI tutor**, then **Open ChatGPT**, **Open Gemini**, **Open Copilot** or **Open Claude** (all have a free version), paste, and ask why you got it wrong, in English or Bahasa Melayu. Your name and ID are not copied, and the app itself sends nothing anywhere. If the AI disagrees with the worked answer, trust the worked answer.

Looking back at questions you have done

Press **My history** to open your most recent question, then **◀ Older** and **Newer ▶** to move through all of them, or press **Review** on any row in *My tutorial results*. You see your first-attempt answers, the correct answers and the full worked answer. Reviewing never changes your marks or level.

What each strategy asks

Every question is worth 10 marks. The answer boxes follow the steps of the method, so if you can do the steps, you can fill the boxes.

Hedging (7-step method)

Box	What you enter	Contract notes
1	Hedging strategy	FKLI, FKLM and SSF also have holding hedge
2	Number of contracts	FKLI and FKLM: portfolio × % hedged × beta ÷ (futures × RM50 or RM10), rounded down; SSF: shares ÷ 100; FKB3: principal ÷ RM1 million; FMG5: nominal ÷ RM100,000; FCPO: tonnes ÷ 25
3 to 6	Hedging table: cash or spot market today, futures today, cash or spot later, futures later (A to D)	Pick the option that matches your own table
7	Profit or loss from futures	Direction + amount
8	Cash market result	FCPO: total revenue or cost; FKLI, FKLM, FMG5: change in value; SSF: value of shares; FKB3: interest revenue or expense (90/360)
9	Net effect	Net cash inflow or outflow + amount
10	Effective price or rate	FCPO RM per tonne; FKLI/FKLM index points; SSF RM per share; FMG5 per RM100; FKB3 effective interest rate %

Speculation (6-step method)

Box	What you enter
1	Position: long (buy first) or short (sell first)
2	Total initial margin (TIM)
3	Total maintenance margin (TMM)
4 to 7	Marked-to-market table: DPL, BM, CM and VM for every day (one mark per fully correct column)

Box	What you enter
8	Total profit or loss after commission
9	Rate of return on margin (%)
10	Percentage change in the futures price, Day 0 to the last day

Spreading (4-step method)

Box	What you enter
1	Bull spread or bear spread
2 to 5	Spread table: near term today, further term today, near term later, further term later (A to D)
6	Basis point today (SP − BP, can be negative)
7	Profit or loss on the near term contract
8	Profit or loss on the further term contract
9	Net profit or loss
10	Basis point later

Arbitrage

Box	FCPO	FKLI, FKLM, SSF	FKB3
1	Days to maturity (t)	Days to maturity (t)	Fair value (forward) rate %
2	Fair value	Fair value	Fair value price (100 − rate)
3	Strategy	Strategy	Over-priced or under-priced strategy
4	Arbitrage table, 4 boxes × 0.5	Arbitrage table, 4 boxes × 0.5	Number of contracts
5	Revenue from selling FCPO	Futures profit or loss	Trading activity table, 4 boxes × 0.5
6	Cost of buying CPO	Profit or loss on the shares	Futures profit or loss

Box	FCPO	FKLI, FKLM, SSF	FKB3
7	Interest on borrowing	Interest on borrowing	Total interest expense
8	Storage cost	Dividend received	Total interest revenue
9	Net profit or loss	Net profit or loss	Net profit or loss

When the futures is underpriced (FCPO, FKLI, FKLM, SSF), reverse cash and carry needs short selling, which is treated as impractical here. The right answer is then "no transaction" in every table box and 0 for every amount.

Inter-market spread (FKLI only)

An inter-market spread buys and sells index futures with the same contract month in two markets, for example Hang Seng Index futures (HSF) or S&P 500 Index futures against FKLI. Buy the futures expected to outperform and sell the one expected to underperform.

Box	What you enter
1	Strategy: buy the foreign futures and sell FKLI, or the reverse
2	Contract value of the foreign futures in its own currency (price × size)
3	That contract value converted into RM (× exchange rate)
4	Contract value of FKLI (price × RM 50)
5	Spread ratio: higher value ÷ lower value, always rounded down (35.9 becomes 35)
6a to 6d	Spread table: foreign today, FKLI today, foreign later, FKLI later (A to D, 0.5 mark each)
7	Profit or loss from the foreign futures, converted into RM
8	Profit or loss from FKLI
9	Net profit or loss of the spread (box 7 + box 8)

Each leg's profit or loss = (selling price − buying price) × number of contracts × size − total commission. Work out the foreign leg in its own currency first, then convert it into RM.

Saving progress and sharing results

Your levels, marks and history stay in the browser you use, even after you close the page. A different browser, a private window or clearing your browsing data starts fresh, so save your progress at the end of each session.

Moving to another device or browser:

1. Press **Save progress** under *My tutorial results*. A small file goes to your Downloads. If no file appears (common on iPad and phones), press **Copy progress text** in the box that opens and keep it in Notes, WhatsApp or email.
2. On the new device, open the app and choose **Continue from saved progress** on the first screen (or **Load progress** under your results). Pick the file, or paste the text and press *Load this progress*.
3. You carry on at the same level in every set, with the same results and history.

Do not edit the progress file or text: an edited one is refused. *Reset my progress*, under your results, clears everything in that browser (press it twice to confirm).

If your lecturer asks for your results:

1. Press *Edit* at the top and add your student ID and class, as your lecturer asks.
2. Under *My tutorial results*, press **Copy results (CSV)** and paste the text where your lecturer says, or press **Download CSV** to save a file.
3. Submit it exactly as the app produced it. The last line is a **check code**, so your lecturer can see if any name, mark or row was changed after export.

The results file lists each question, its code and level, your first-try mark, the boxes you got wrong and the type of each mistake.

For lecturers: the class report at https://fahmirahim0.github.io/praktifin/derivatives/report.html combines many students' results files into one report: weakest question sets, the steps most often wrong, the most common mistake types and each student's progress. It runs in your browser; no file is uploaded anywhere.

How to study with it

Aim to understand why each step is there, not to memorise answers: the numbers change in every question.

Order	Sets to do
1	FCPO hedging, then FKLI and FKLM hedging (same method, RM50 or RM10 per index point)
2	FMG5 hedging and FKB3 hedging (watch the 90/360 interest)
3	Speculation for every contract
4	Spreading for every contract
5	Arbitrage: FCPO, then FKLI and FKLM, then FKB3
6	FKLI inter-market spread
7	SSF sets: the same methods with 100 shares per contract (arbitrage adds a dividend, like FKLI)

- Write all the steps on paper before you touch the app. Then use the app to find where your method went wrong, not just whether it did.
- Ask what the result means: why did the hedge lock in the price even though the futures leg lost money? Why did the spread make money when both prices fell?
- Read the scenario like a dealer: in an email or a chat, underline the figures you need before you calculate.
- Do a few questions every week rather than many the night before a test.

Troubleshooting

Problem or question	What to do
Check my answers does nothing	Every box must be filled, including every table cell and the direction buttons. A message under the button says what is missing.
My answer is right but marked wrong	Check the rounding (contracts are whole numbers, rounded down), the direction (Profit or Loss), and that you did not type a minus sign outside the table.
My marks disappeared	Marks are kept in the browser you used. On another device, or after clearing browsing data, use Continue from saved progress.

Problem or question	What to do
Copy results does not work	Some browsers block copying. Use *Download CSV* instead.
Can I redo a question?	Each checked question counts once. To look at it again, press My history or Review.
Can I save a question as a PDF?	Press *Download question (PDF)* on the question card, or *Print question* and choose *Save as PDF*.
The app and my notes disagree	Note the question code (for example T-FKB3-A-04) and ask your lecturer or tutor.

PraktiFin © 2026 Universiti Teknologi MARA. Developed by Dr Fahmi Abdul Rahim, Faculty of Business and Management, UiTM Cawangan Melaka.