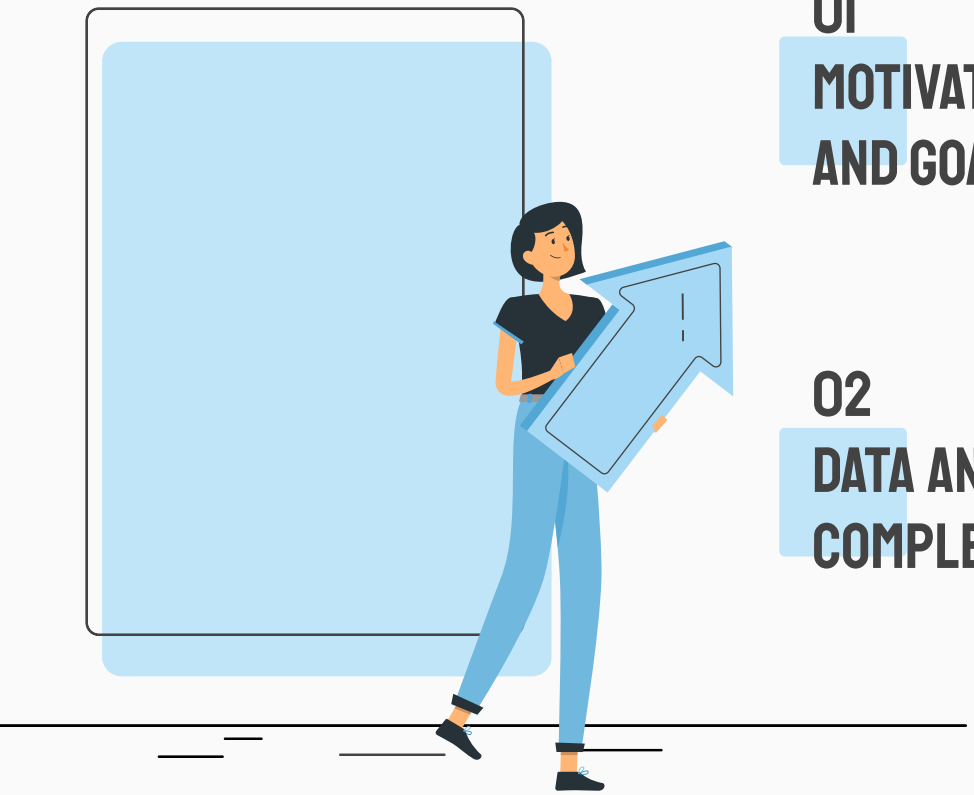
HEC TIMETABLE

Laura Lo Priore
Matteo Gross
Martina Celic
Ana Gabriela Garcia
Alessia Di Pietro



01
MOTIVATION
AND GOALS

02
DATA AND
COMPLEXITY

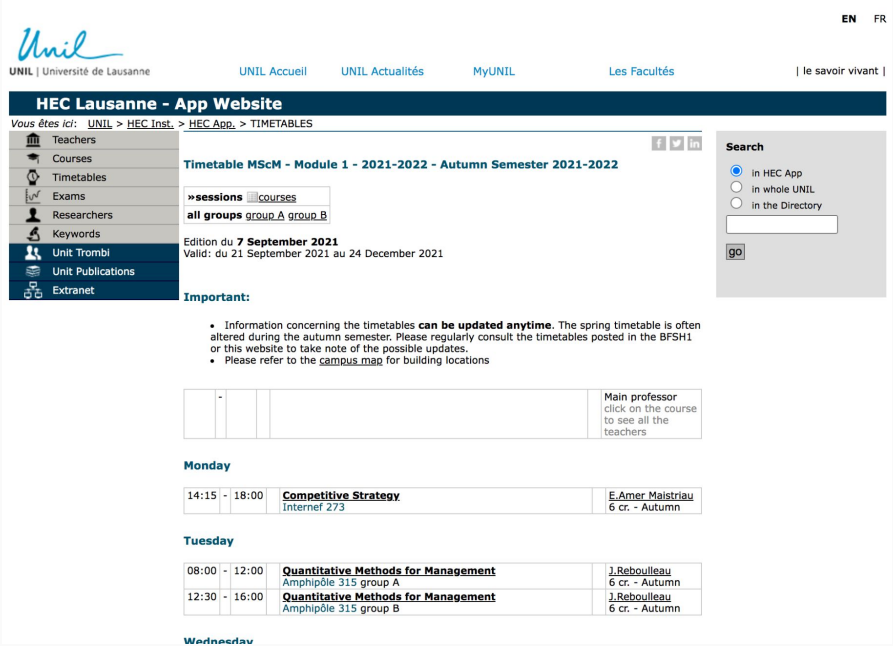
03
OPTIMIZATION

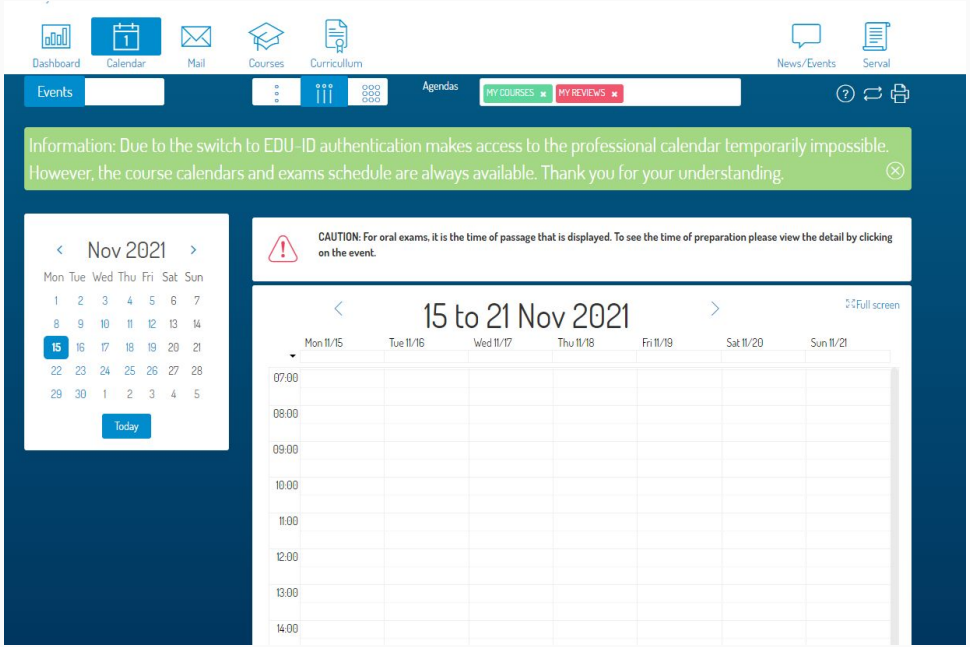
04
FINAL RESULT

01. MOTIVATION AND GOALS

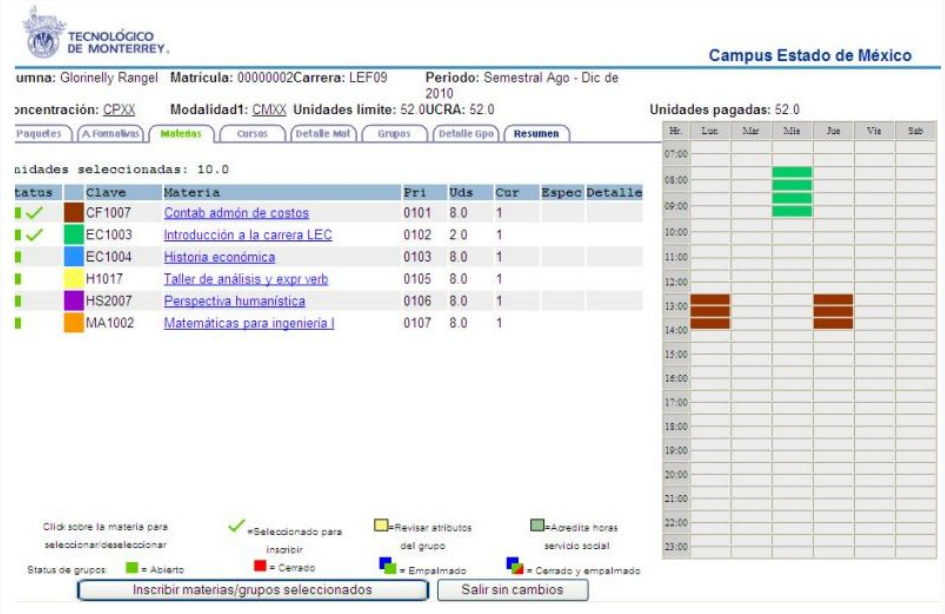
Considering that the actual way of doing a timetable in HEC is inefficient, our goal is to make a more effective and efficient way to create our semester timetable.

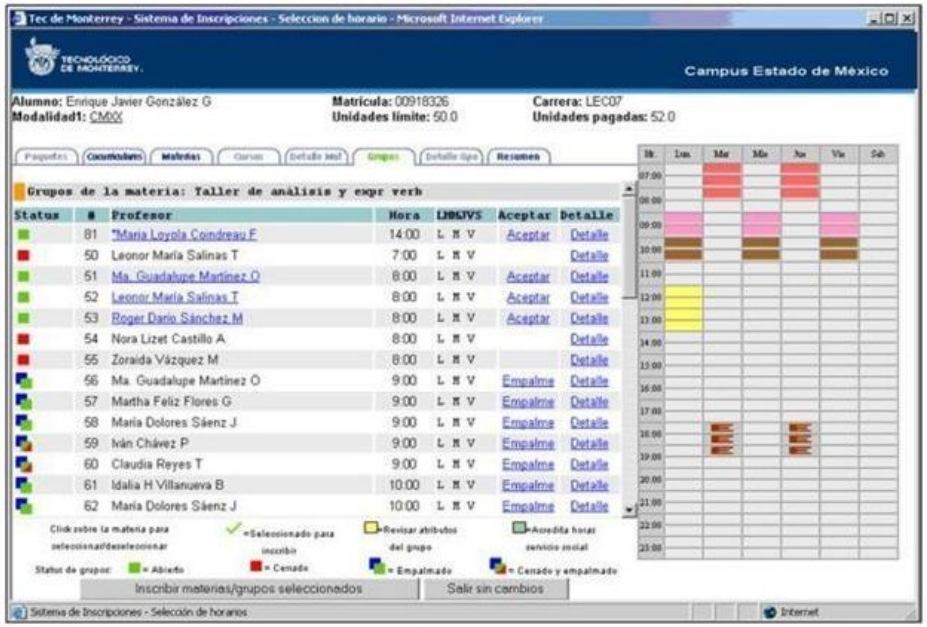
HEC TIMETABLE WEBSITE TODAY



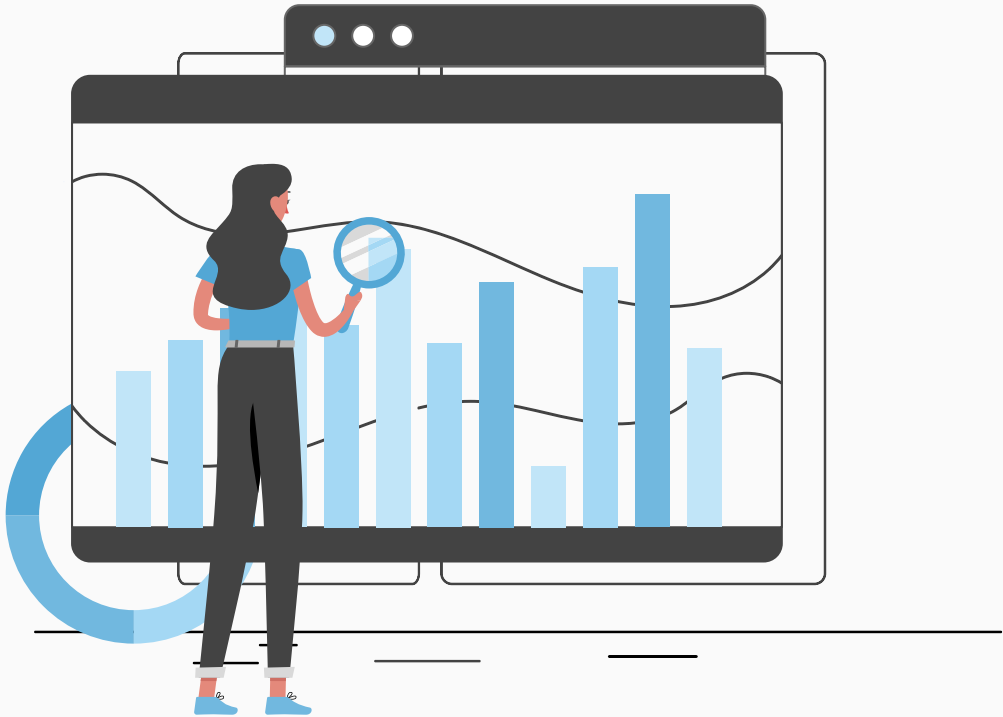


TEC DE MONTERREY TIMETABLE PROGRAM TODAY





02. DATA AND COMPLEXITY



DATA AND COMPLEXITY

Mercredi

08:30	- 12:00	**Fraud and Business Process Analytics** Amphipôle 321 Last 7 weeks - 1st lecture 10 Nov		M.Baumgartner 3 cr. - Automne
08:30	- 12:00	**Luxury Marketing** Internef 121		F.Morhart 6 cr. - Automne
08:30	- 12:00	**Strategy and Development Modes** Internef 233		X.Castaner 6 cr. - Automne
08:30	- 12:00	**Unethical Decision Making - Advanced** Anthropole 2055 Last 7 weeks - 1st lecture 10 Nov		U.Hoffrage 3 cr. - Automne
10:15	- 12:00	**Unethical Decision Making - Basics** Amphimax 410 First 7 weeks/22 Sept-13 Oct-3 Nov in classroom, otherwise online		G.Palazzo 3 cr. - Automne
14:15	- 18:00	**Business Case en Marketing** Anthropole 3174 22-29 sept / 20-27 oct / 17 nov / 1 déc		V.Uhlmann 6 cr. - Automne
14:15	- 18:00	**Human Behavior and Evolutionary Inference** Internef 129		C.Efferson 6 cr. - Automne
14:15	- 18:00	**Individual Behavior in the Digital Environment** Anthropole 2055		T.Schlager 6 cr. - Automne
14:15	- 18:00	**Stratégies digitales** Internef 237		S.Missonier 6 cr. - Automne
17:15	- 19:00	**La recherche dans tous ses états** Amphimax 412		D.Preissmann 3 cr. - Automne

Semester	Day	Class	Professor	Credits	First_7_Weeks	Last_7_Weeks	Start	End	BA_ orientation	BA_ Mandatory
2	Wednesday	Forecasting 1	M. Baumgartner	3	1	0	12.50	16.00	1	0
3	Monday	Programming Tools in Data Science	S. Orso	6	1	1	8.50	12.00	1	0

03.
OPTIMIZATION

BINARY DECISION VARIABLES

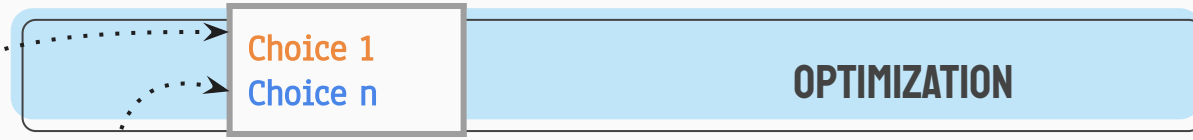
Vector of choices of classes, for each semester

$$choice_{sem} = c(choice_1, \ldots, choice_n)$$

OBJECTIVE FUNCTION

Minimize the total credits per semester

$$\min \sum_1^n choice_i * credits_i =$$
$$choice_1 * \underbrace{credits_1}_{6} + \ldots + choice_n * \underbrace{credits_n}_{3}$$

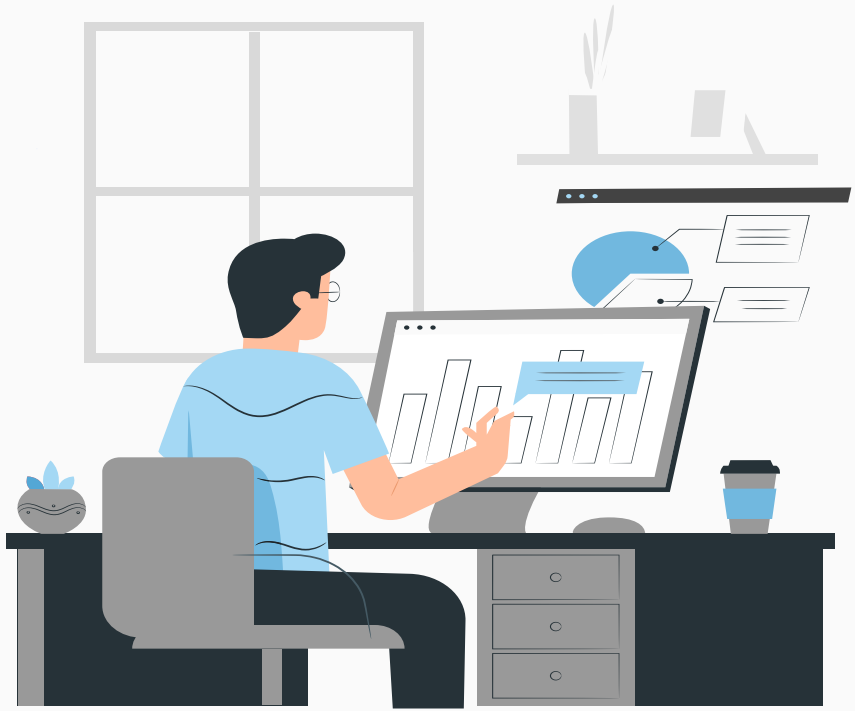


		Class 1	...	Class n		
	Min total credits	**6**		3		
1	Core Credits Elective Credits	**6** 0		0 **3**	>= >=	18 12
2	Monday AM ... Friday PM	**1** 0		0 **1**	<= <=	TRUE (default) TRUE
3	Class i ... Class n	**1** 0		0 **1**	>= >=	FALSE (default) FALSE
4	First Monday 8 ... Last Friday 18	**1** 0		0 **1**	<= <=	1 ... 1

USER'S PREFERENCES

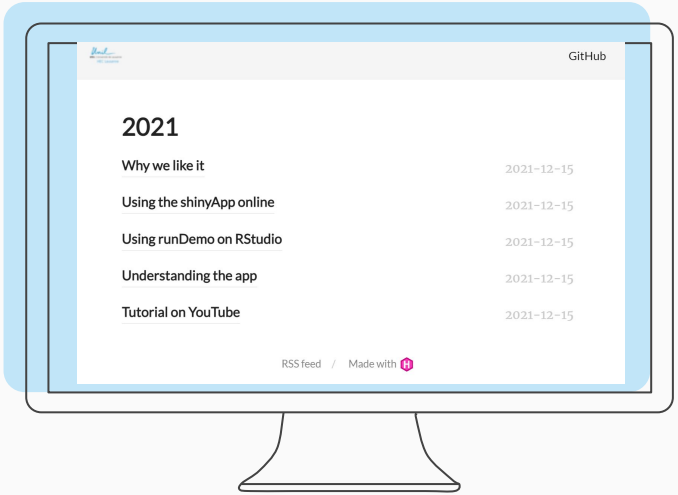
PHYSICAL CONSTRAINTS

04. FINAL RESULT



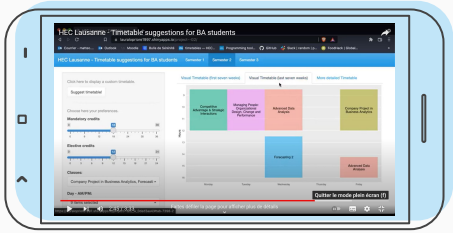
SHINY APP

https://lauralopriore1997.shinyapps.io/project--G2/



WEBSITE

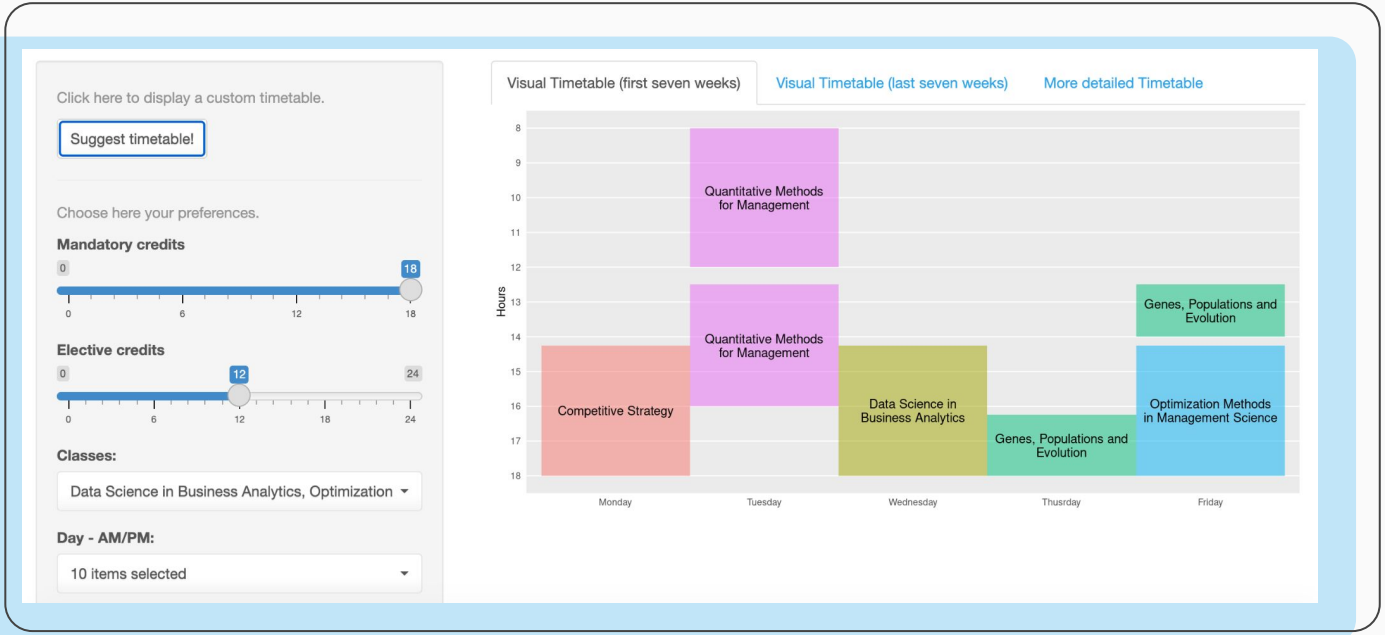
https://blogdown-g2.netlify.app/



VIDEO

https://youtu.be/ELDpShW-nHY

CONCLUSIONS

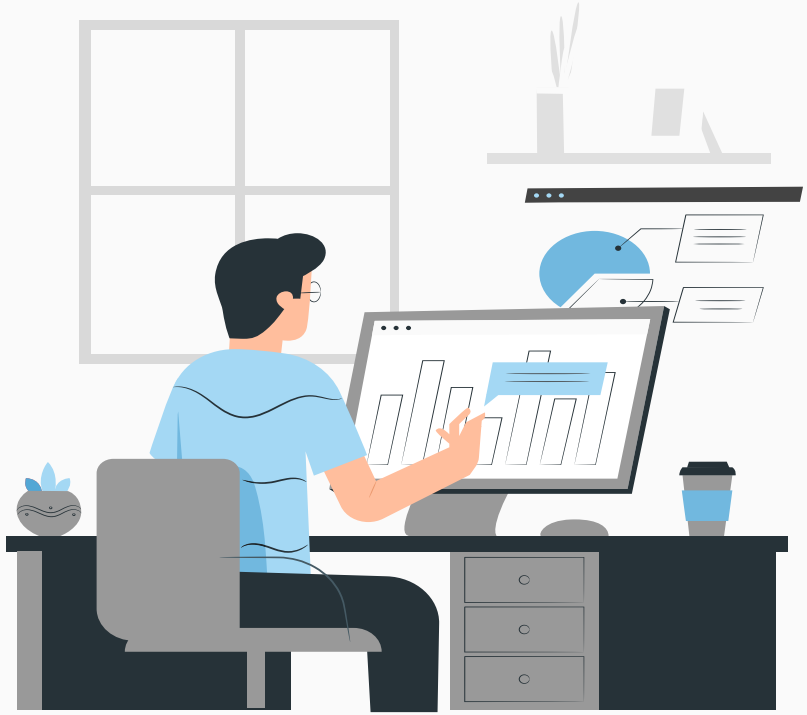


POTENTIAL TO BE IMPLEMENTED IN A UNIVERSITY

→ WEBSITE = EASY FOR STUDENTS AROUND CAMPUS TO USE IT

THANKS

Does anyone have any questions?

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, and infographics & images by **Freepik** and illustrations by **Storyset**

Please keep this slide for attribution.