



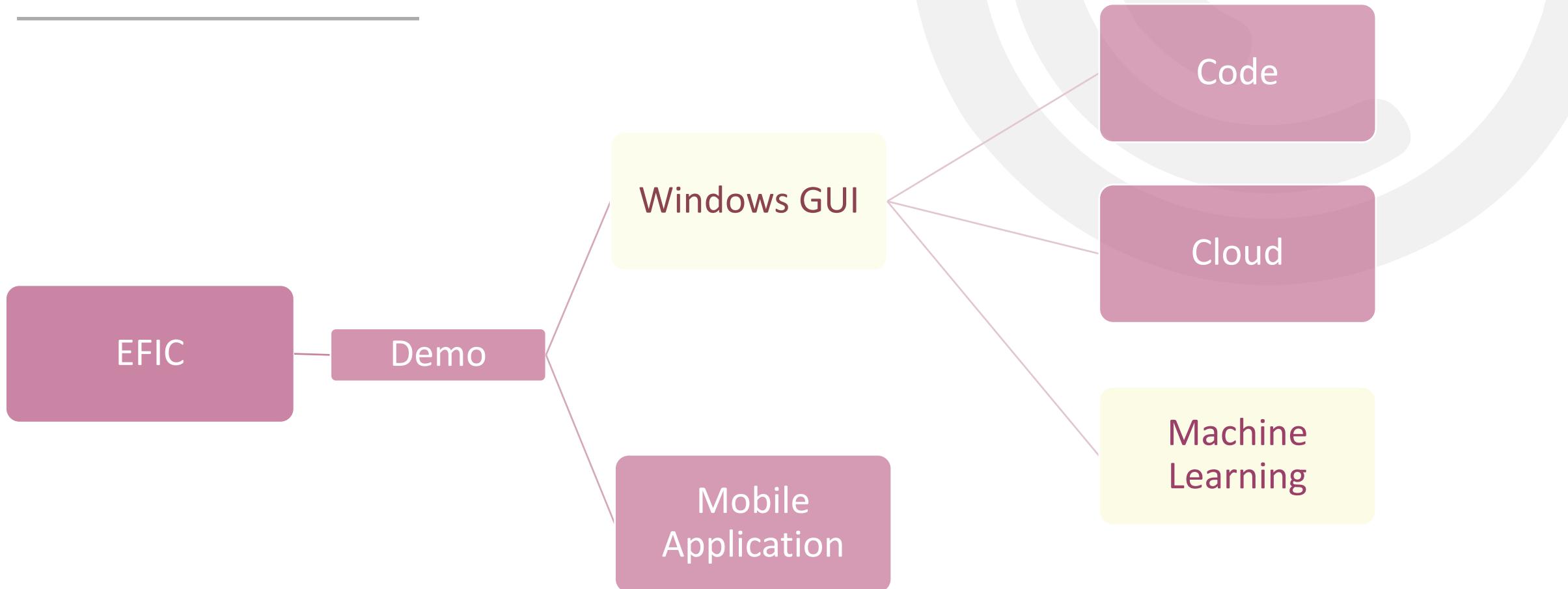
Efficiency Is The Determinant

E F I C

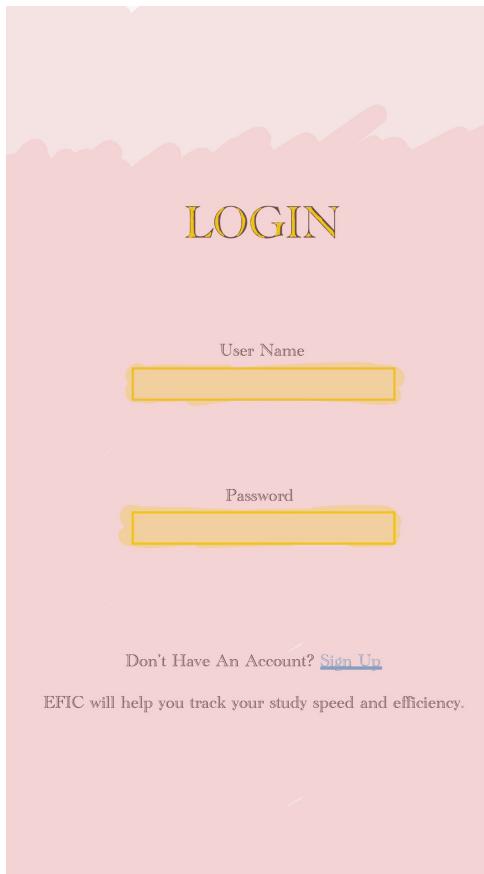
An educational application to help you succeed in your schoolwork.

TEAM PIGEON

INTRODUCTION



MOBILE APPLICATION DEMO



MENU & ASSIGNMENTS PAGE

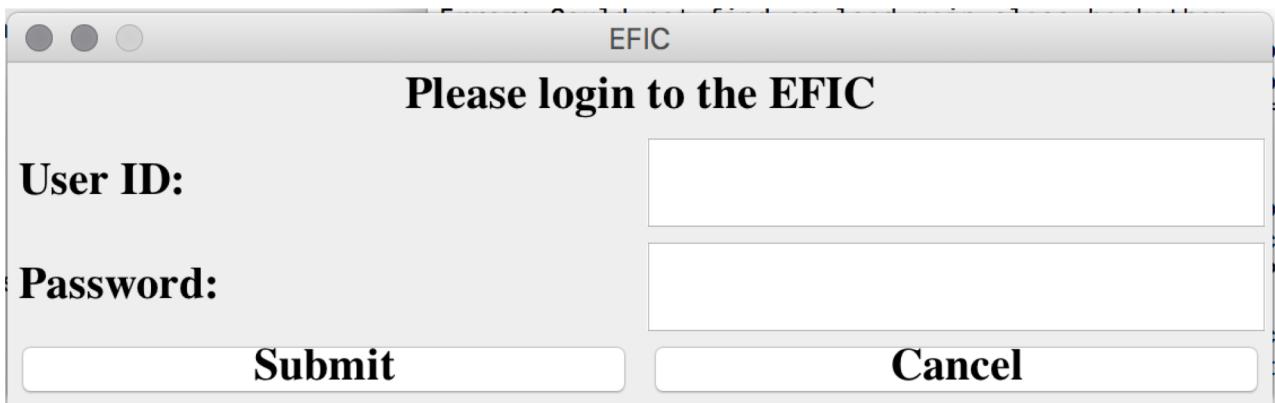


- Requiring user provides school name, class, major. These information would help us to trace their study performance.
- Requiring the user to upload the homework or practice question. The software would recognize the keywords of questions in order to estimate which subjects, or even the specific area the user is studying. For example, if “merge sort”, “quick sort” appear in the questions several times, the software would recognize that the user is studying data structure.

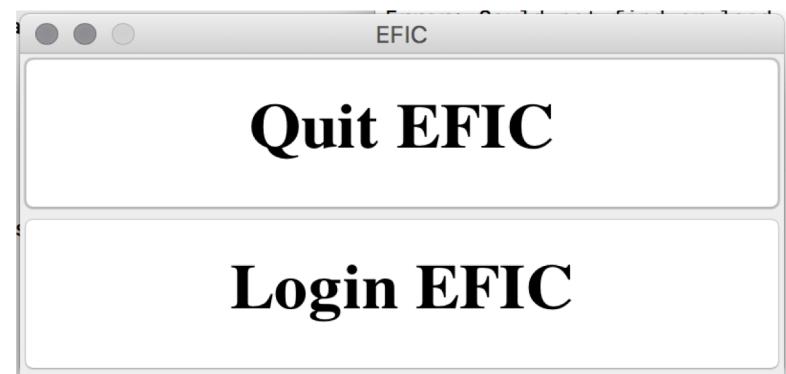


WINDOWS GRAPHIC USER INTERFACE:

hackthon\$ControlListener.class	CLASS FILE
hackthon.class	CLASS File
LoginInterface	JAVA File
LoginInterface.class	CLASS File
LoginPanel	JAVA File
LoginPanel\$1.class	CLASS File
LoginPanel\$ControlListener.class	CLASS File
LoginPanel.class	CLASS File
Question	JAVA File
Question.class	CLASS File
RoulettePanel	JAVA File
RoulettePanel\$1.class	CLASS File
RoulettePanel\$ButtonListener.cl...	CLASS File
RoulettePanel.class	CLASS File
RoulettePlayer	JAVA File
RoulettePlayer.class	CLASS File
RouletteWheel	JAVA File
RouletteWheel\$1.class	CLASS File
RouletteWheel.class	CLASS File
RPLList	JAVA File

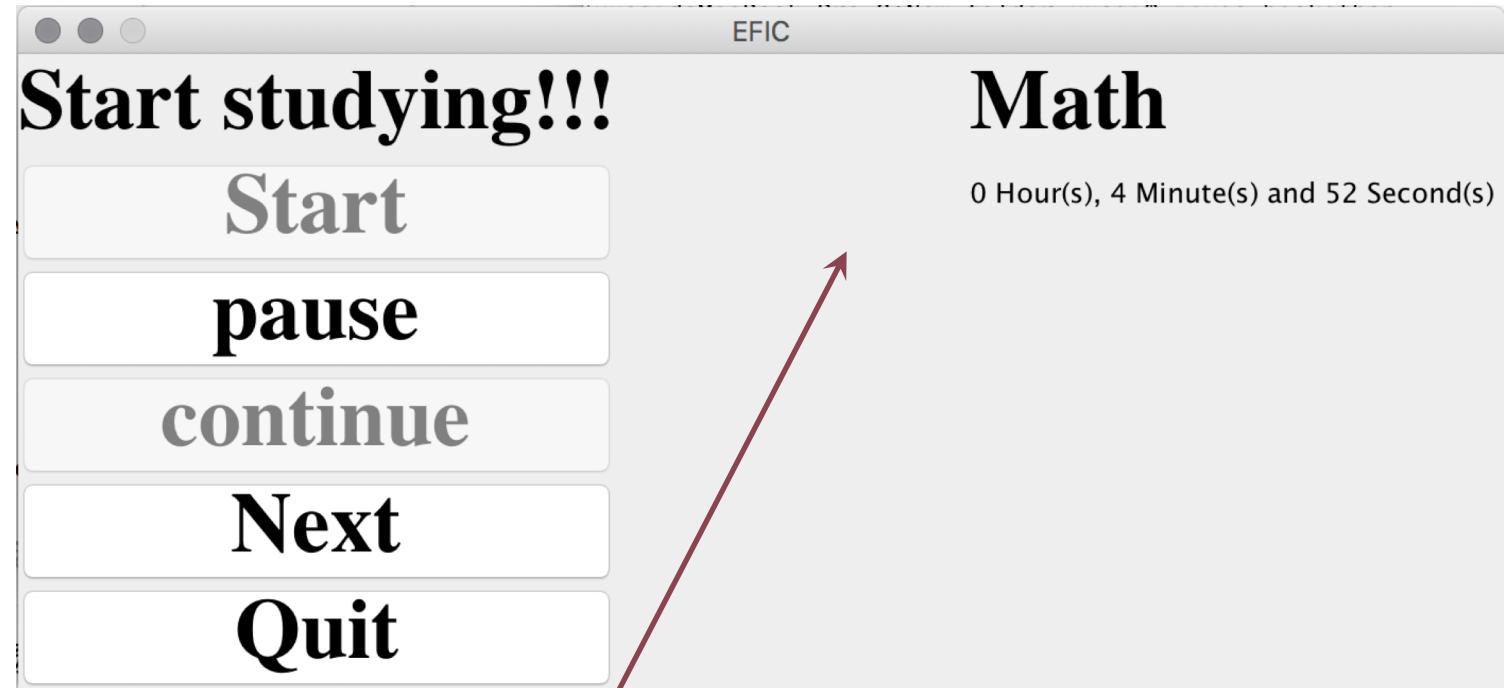
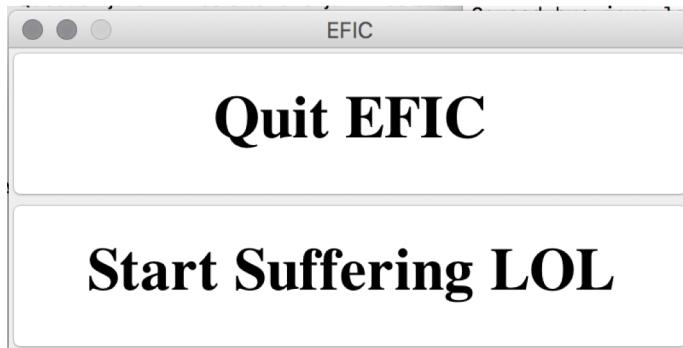


EFIC



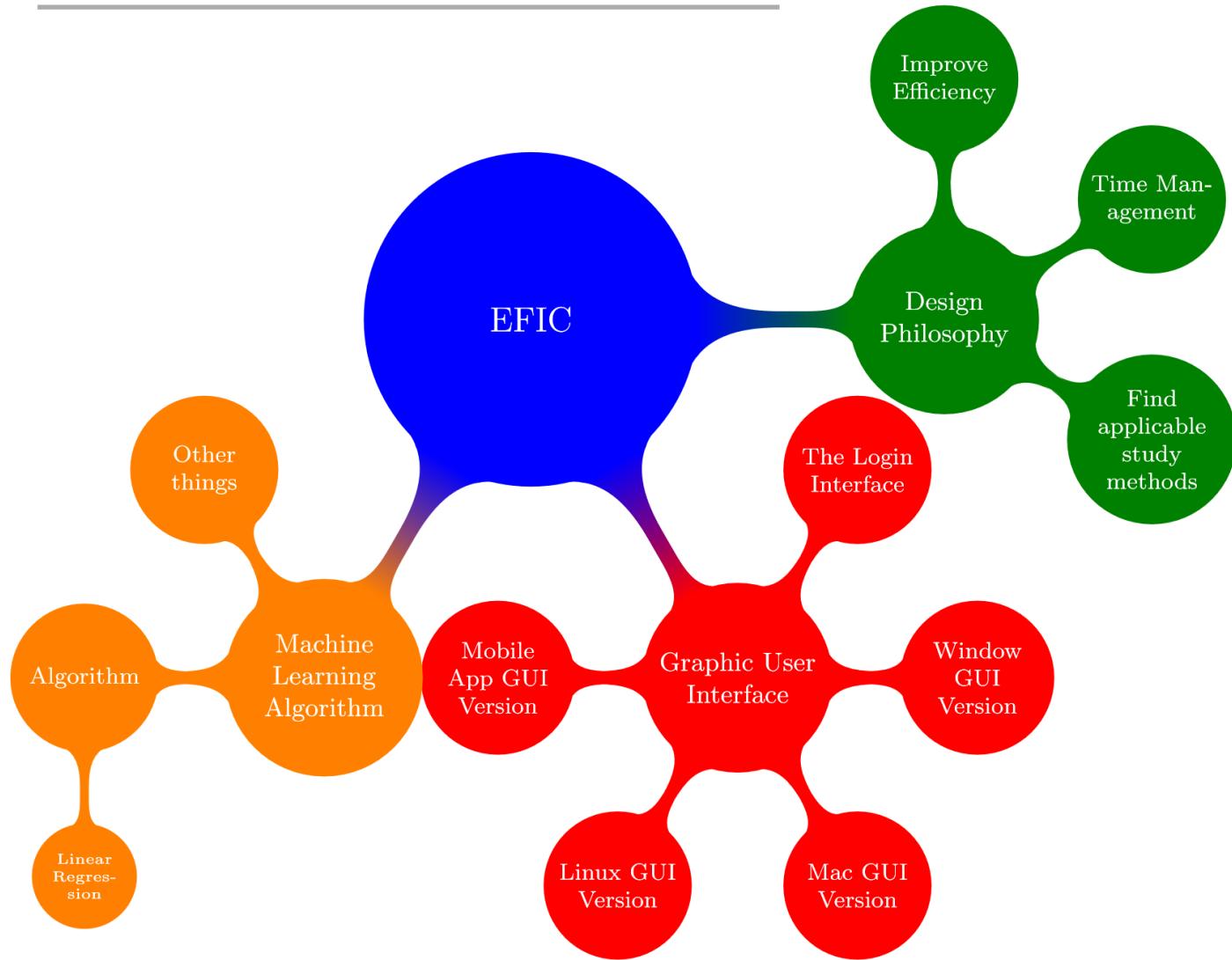
- Examples of our user
interface

WINDOWS GRAPHIC USER INTERFACE :



A timer to record the time you've spent on this homework

DESIGN PHILOSOPHY



EFIC

EFIC is to help you:

- Improve efficiency
- Find applicable studying method
- Be expert in time management
- Maximize Competitiveness

FEATURES

TIME NOTIFICATION

Base on the data and information that the user provides, the software would predict how much time the user would spend on studying this subject.

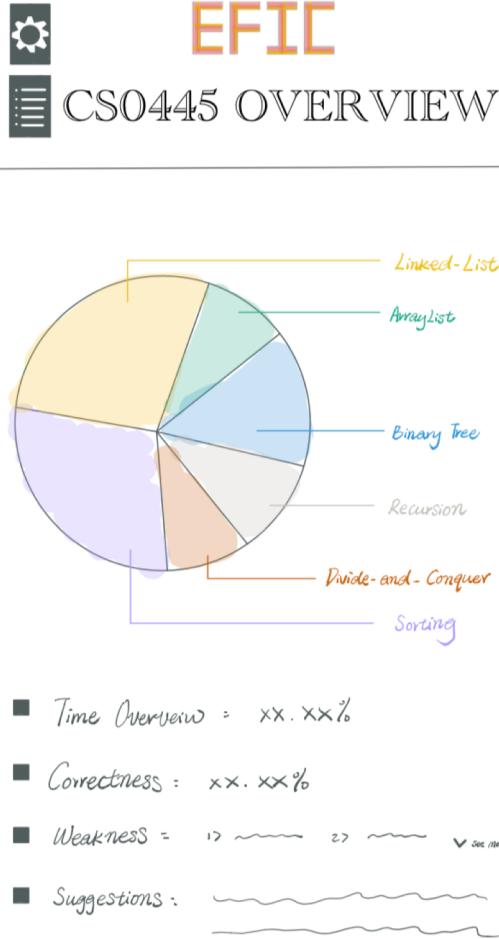


After user finish studying, he could provide the actual studying time. The software would use the machine learning algorithm to modify the future prediction in order to make the prediction more precise.



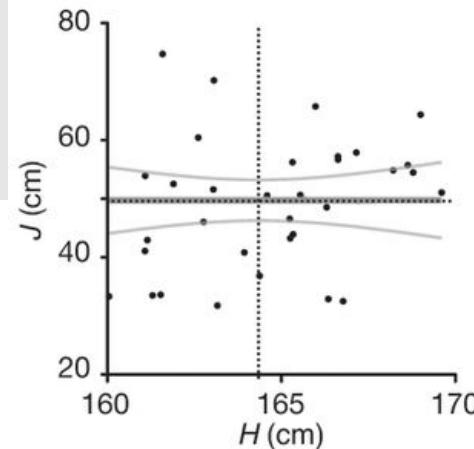
FUTURE STUDY TIME INFERENCE

LINEAR REGRESSION MODEL



a Uncorrelated predictors

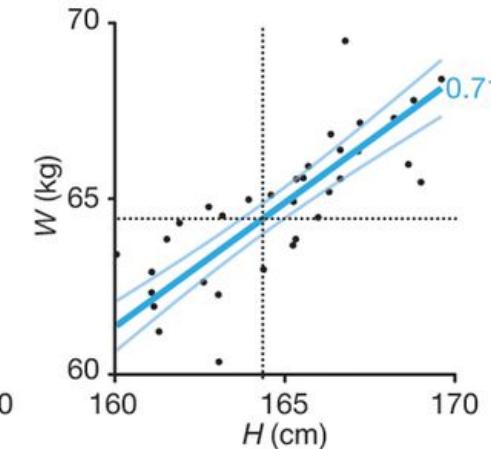
$$r(H, J) = 0$$



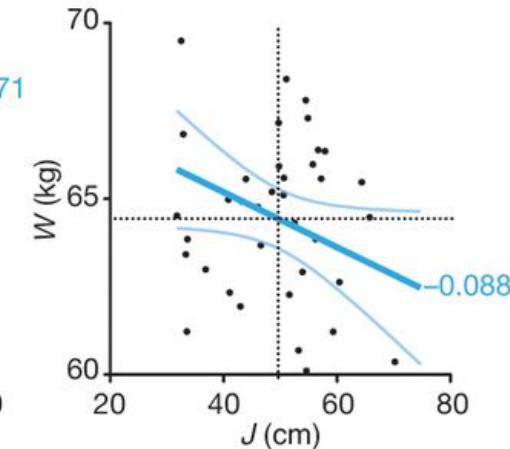
b

Regression for uncorrelated predictors

Weight on height

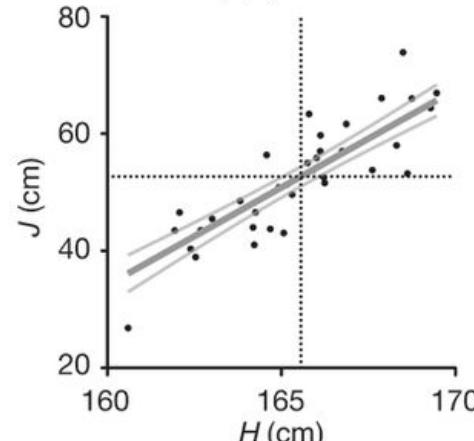


Weight on jump height



c Correlated predictors

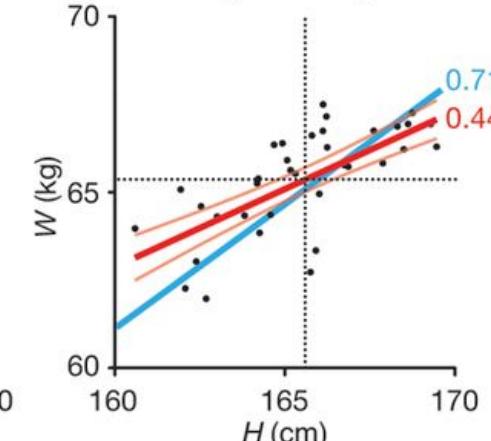
$$r(H, J) = 0.9$$



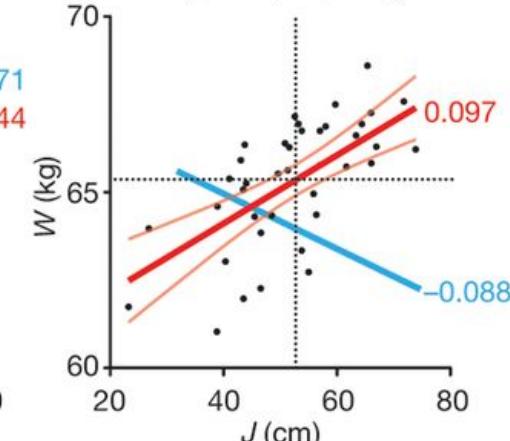
d

Regression for correlated predictors

Weight on height



Weight on jump height



FEATURES

STUDYING METHOD ANALYSIS

The user can choose whether provide their homework and exam grade. The software can analyze whether the user should change their studying method by machine learning algorithm.



After the user finish studying, he can choose the questions that they have problem. The software can recognize the keywords of questions. When the user is doing review, the software can give the alert about the parts he or she should pay attention to.



TARGETING WHERE YOUR ABILITIES LACK



*An educational application to
help you succeed in homework.*

THANK YOU!



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YUANZHE HUANG, MEIZHEN JI



UNIVERSITY OF PITTSBURGH

TEAM PIGEON