

BCRITW

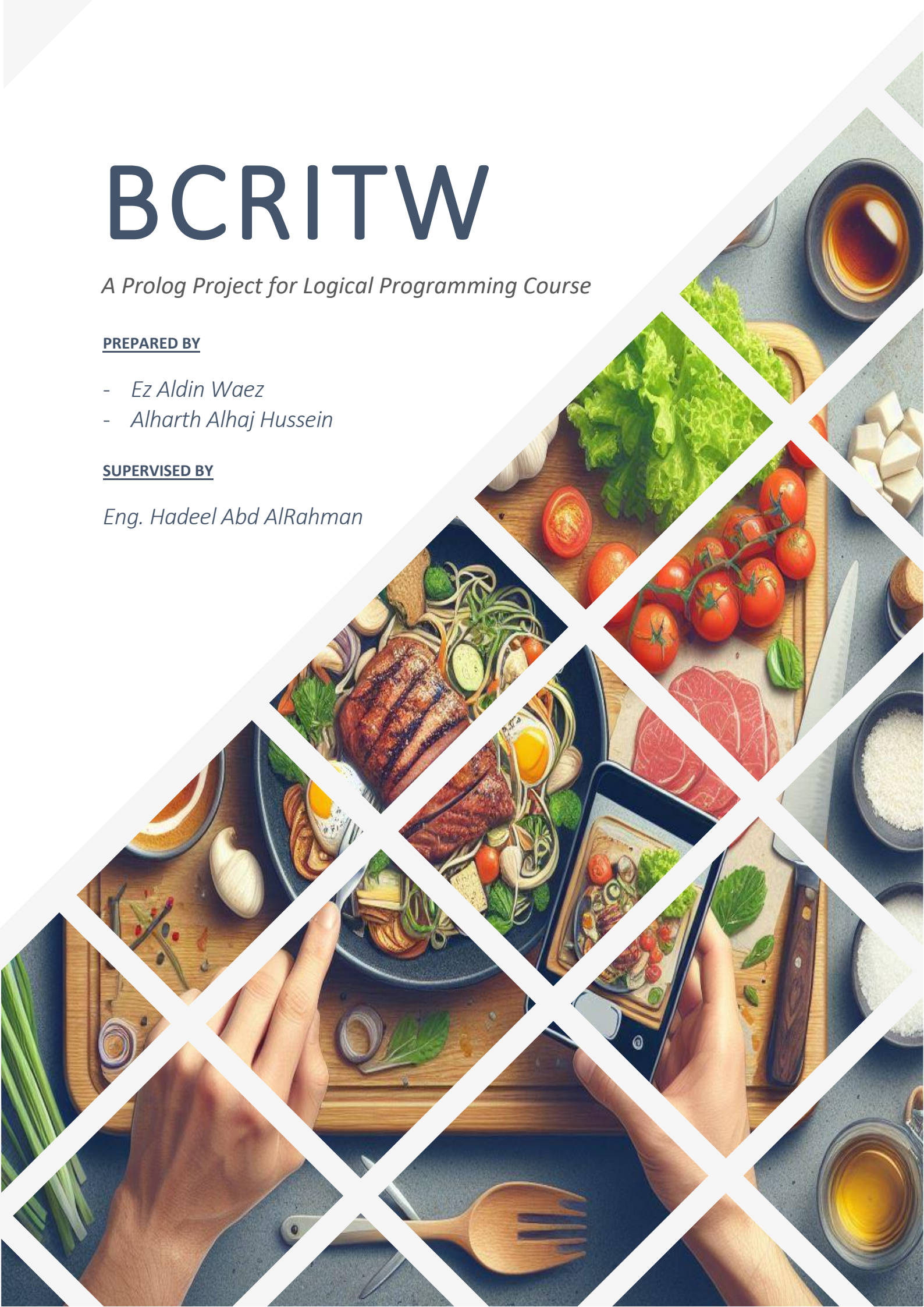
A Prolog Project for Logical Programming Course

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Best Cooking Recommender In The World.

Just a **Prolog** project for the college.

Introduction

In this CLI-Based program, you are supposed to tell it what are the ingredients you have (by answering yes/no questions), and it'll recommend you some meals to cook with these ingredients.

Good Look!

Requirements

- **SWI-Prolog**

How To Run

Type the following on your terminal:

- `cd <project-folder-path>`
- `swipl main.pl`

(do not forget to replace `<project-folder-path>` with the actual path)

Then type **run.** to run the program.

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meals.pl

```
1 meals([
2     ['Labania', ['Yogurt', 'Rice', 'Meat', 'Spices', 'Garlic', 'Egges']],
3     ['Kebbah', ['Spices', 'Meat', 'Onion', 'Bulgur']],
4     ['Bamia', ['Spices', 'Meat', 'Tomato Souce', 'Okra', 'Bread']],
5     ['Safargeliah', ['Spices', 'Meat', 'Tomato Souce', 'Quince']],
6     ['Mehshi', ['Spices', 'Meat', 'Vegetables', 'Rice']],
7     ['Mulukhiyah', ['Spices', 'Meat', 'Garlic', 'Mulukhiyah Leaves']],
```

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```
8      ['Fasolia', ['Spices', 'Meat', 'Tomato Souce', 'Garlic', 'Beans']],
9      ['Mjadarah', ['Onion', 'Rice', 'Lentil']],
10     ['Spaghetti', ['Spices', 'Tomato Souce', 'Vegetables',
11     'Macaroni']],
12     ['Yabraq', ['Spices', 'Meat', 'Garlic', 'Rice', 'Grape Leaves']],
13     ['Orman-Blaban', ['Spices', 'Meat', 'Butter', 'Yogurt', 'Corn
Starch', 'Egges']]
14 ]).
```

main.pl

```
1  :- include('meals.pl').
2
3  run :-
4      print_welcome,
5      meals(Meals),
6      check_meals(Meals),
7      exit.
8
9  print_welcome :-
10     write('*****'), nl,
11     write('*          B-C-R-I-T-W          *'), nl,
12     write('*****'), nl,
13     nl.
14
15  check_meals([]) :-
16     write('You cannot cook anything else!'), nl,
17     nl.
18  check_meals([H|T]) :-
19     check_meal(H),
20     check_meals(T).
21
22  check_meal([MealName, Ingredients]) :-
23     check_ingredients(Ingredients),
24     nl,
25     write('* You can cook '), write(MealName), write(' *'), nl,
26     nl,
27     ask_to_complete.
28
29  check_meal(_). % it will always return `true`, even if
30                 % `check_ingredients` returns `false`.
31
32  check_ingredients([]).
33  check_ingredients([H|T]) :-
34     check_ingredient(H),
35     check_ingredients(T).
```

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```
35
36 check_ingredient(Ingredient) :-
37     yes(Ingredient) -> true ;
38     no(Ingredient) -> fail ;
39     ask_about(Ingredient).
40
41 ask_about(Ingredient) :-
42     write('Do you have '), write(Ingredient), write('? [y/n]: '),
43     read(Reply),
44     (
45         (Reply == y; Reply == yes) -> assert(yes(Ingredient)), true ;
46         (Reply == n; Reply == no) -> assert(no(Ingredient)), fail ;
47         write('Invalid answer! (write \'yes.\' or \'no.\')'), nl,
48         ask_about(Ingredient)
49     ).
50
51 ask_to_complete :-
52     write('* Do you want to complete? [y/n]: '),
53     read(Reply),
54
55     (Reply == y; Reply == yes) -> true ;
56     (Reply == n; Reply == no) -> exit ;
57     write('Invalid answer! (write \'yes.\' or \'no.\')'), nl,
58     ask_to_complete
59 ).
60
61 :- dynamic yes/1, no/1.
62
63 undo :-
64     retract(yes(_)),
65     fail.
66 undo :-
67     retract(no(_)),
68     fail.
69 undo.
70
71 exit :-
72     undo,
73     nl,
74     write('*****'), nl,
75     write('* Thanks For Using This App *'), nl,
76     write('*****'), nl,
77     nl,
78     halt.
```