BCRITW

A Prolog Project for Logical Programming Course

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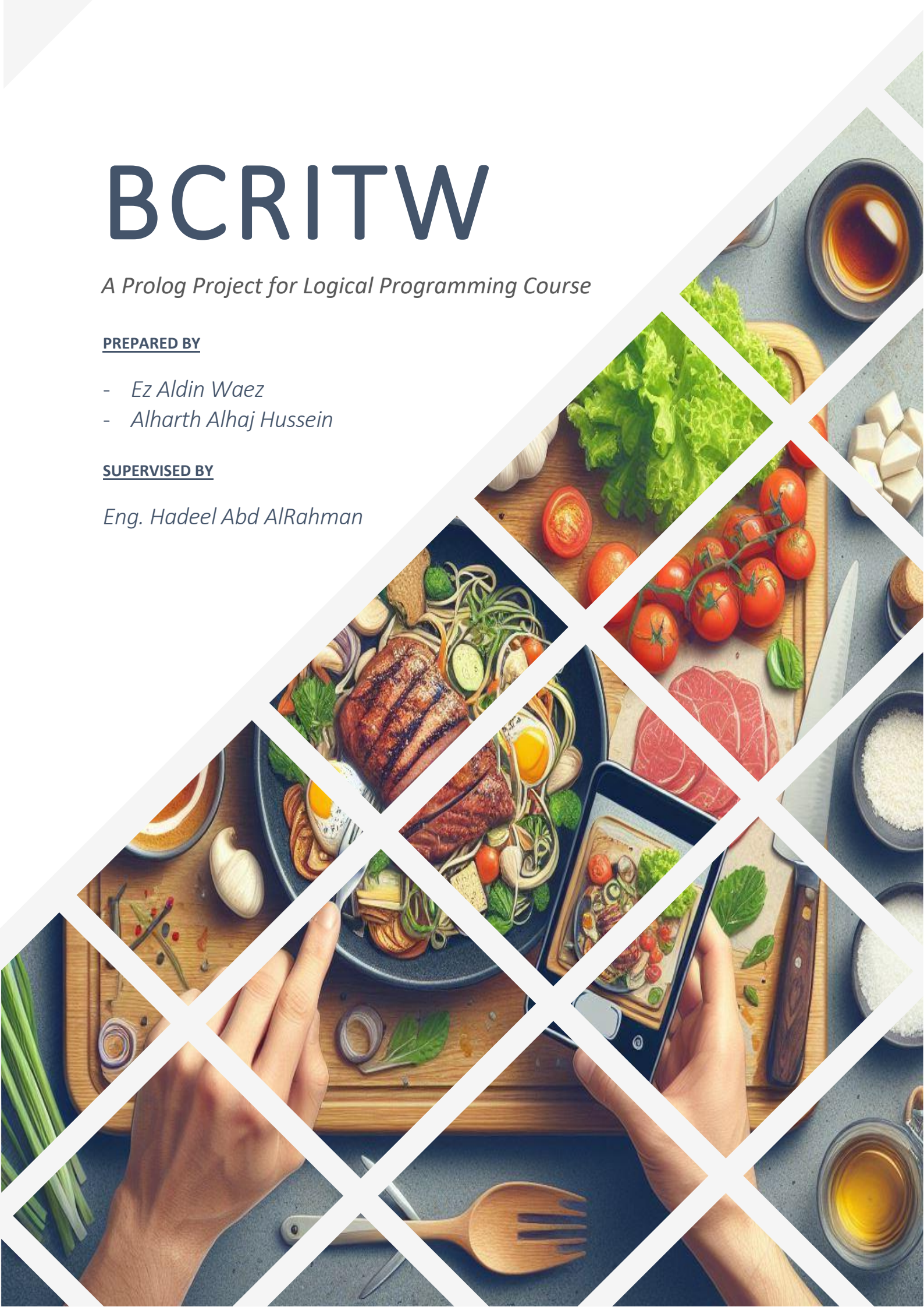

BCRITW

README.md

BCRITW

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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main.pl

```
:- include('meals.pl').

run :-
    print_welcome,
    meals(Meals),
    check_meals(Meals),
    exit.
```

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```
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
   `check_ingredients` returns `false`.
30
31 check_ingredients([]).
32 check_ingredients([H|T]) :-
33     check_ingredient(H)
34     check_ingredients(T).
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 :-
```

```
    write('* Do you want to complete? [y/n]: '),
    read(Reply),

        (Reply == y; Reply == yes) -> true ;
        (Reply == n; Reply == no) -> exit ;
        write('Invalid answer! (write \'yes.\' or \'no.\')'), nl,
        ask_to_complete
    ).

:- dynamic yes/1, no/1.

undo :-
    retract(yes(_)),
    fail.
undo :-
    retract(no(_)),
    fail.
undo.

exit :-
    undo,
    nl,
    write('*****************************'), nl,
    write('* Thanks For Using This App *'), nl,
    write('*****************************'), nl,
    nl,
    halt.
```

meals.pl

```
meals([
    ['Labania', ['Yogurt','Rice','Meat','Spices','Garlic', 'Egges']],
    ['Kebbah', ['Spices', 'Meat', 'Onion', 'Bulgur']],
    ['Bamia', ['Spices', 'Meat', 'Tomato Souce', 'Okra', 'Bread']],
    ['Safargeliah', ['Spices', 'Meat', 'Tomato Souce', 'Quince']],
    ['Mehshi', ['Spices', 'Meat', 'Vegetables', 'Rice']],
    ['Mulukhiyah', ['Spices', 'Meat', 'Garlic', 'Mulukhiyah Leaves']],
    ['Fasolia', ['Spices', 'Meat', 'Tomato Souce', 'Garlic', 'Beans']],
    ['Mjadarah', ['Onion', 'Rice', 'Lentil']],
    ['Spaghetti', ['Spices', 'Tomato Souce', 'Vegetables',
'Macaroni']],
    ['Yabraq', ['Spices', 'Meat', 'Garlic', 'Rice', 'Grape Leaves']],
    ['Orman-Blaban', ['Spices', 'Meat', 'Butter', 'Yogurt', 'Corn
Starch', 'Egges']]
]).
```