**BCRITW**

A Prolog Project for Logical Programming Course

prepared by

* Ez Aldin Waez
* Alharth Alhaj Hussein

supervised by

Eng. Hadeel Abd AlRahman

# 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. Copyrights Made by Ez Aldin Waez & Alharth Alhaj Hussein ... |

# 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 `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** :- |
| 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**. |

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