

CALL FOR PARTICIPATION

1st Computer Cooking Contest

CCC 2008 @ ECCBR 2008

September 1, 2008, Trier (Germany)

www.computercookingcontest.net

Competition:

- The Computer Cooking Contest is an open competition.
- Any student, research group is invited to submit software application that creates a recipe for a single dish or even a three course menu.
- The input will be a database of basic recipes from which appropriate recipes must be selected.
- The queries to the system consist of a number of wanted ingredients and other requirements for the dish or menu.

Exercise recipe base:

<RECIPE>

<TI>**SWEET BISCUITS**</TI>

<IN>2 c Baking mix</IN>

<IN>2/3 c Milk</IN>

<IN>1/4 c Cinnamon Sugar</IN>

<IN>2 tb Butter</IN>

<PR>1. Combine mix and milk and beat until smooth. If dough feels too sticky, add more mix - up to 1/4 c. 2. Turn dough out onto a surface dusted with baking mix or plain flour, roll dough into a ball to coat, and knead gently 10 times. Roll dough out to 1/2" thickness and cut into 2" circles or squares. 3. Place on an ungreased cookie sheet, brush tops with melted butter and dust with cinnamon sugar to brown and bake for 8 to 10 minutes at 400 degrees.</PR>

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<TI>**Pizza Sauce**</TI>

<IN>28 oz. can Progresso plum tomatoes with basil, drained</IN>

<IN>12 oz. tomato paste</IN>

<IN>1/2 teaspoon salt</IN>

<IN>1/2 teaspoon pepper</IN>

<IN>1 teaspoon onion powder</IN>

<IN>1 tablespoon oregano</IN>

<IN>1 teaspoon garlic powder</IN>

<IN>2 tablespoons Parmesan cheese, canned or fresh</IN>

<IN>1/8 cup olive oil</IN>

<PR>Yield: 4 servings This sauce has a quality similar to restaurant flavor, but being freshly made it seems to take on a better flavor. Puree well the drained tomatoes. It is important to use Italian plum tomatoes and not regular canned tomatoes. The flavor is distinctively different. If you cannot find Progresso plum tomatoes with basil, add 1/2 teaspoon dried basil to the tomatoes. Place pureed mixture in a heavy saucepan. Add remaining ingredients, except for grated cheese. Simmer for 1/2 hour, or longer, if necessary. Add cheese in the last 10 minutes of cooking. Sauce can be frozen, if desired.</PR>

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<TI>**Mandarin Orange Muffins**</TI>

<IN>1 1/2 cups flour</IN>

<IN>1 3/4 teaspoons baking powder</IN>

<IN>1/2 teaspoon salt</IN>

<IN>1/4 teaspoon allspice</IN>

<IN>1/4 teaspoon nutmeg</IN>

<IN>1/2 cup sugar</IN>

<IN>1/3 cup margarine</IN>

<IN>1 egg, lightly beaten</IN>

<IN>1/4 cup milk</IN>

<IN>10 oz. can mandarin orange, drained</IN>

<PR>Sift flour and other dry ingredients together. Cut in margarine. Combine egg and milk and add to dry ingredients, mix until moistened. Fold in orange pieces and break them up. Fill greased muffin tins 3/4 full. Bake at 350 F for 20 to 25 minutes. Remove from muffin tins while still warm. Dip tops in melted butter and sugar-cinnamon mixture.</PR>

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<TI>**BEAN AND RICE BURRITOS**</TI>

<IN>28 oz Water-packed pinto beans drained and rinsed</IN>

<IN>1 c Cooked brown rice; OR up to double this amount</IN>

<IN>1 ds Chili powder</IN>

<IN>1 ds Garlic powder</IN>

<IN>1 ds Cumin</IN>

<IN>3/4 c Water</IN>

<IN>6 Tortillas</IN>

<IN>1 Head iceberg lettuce, chopped and dried</IN>

<IN>1 bn Scallions; chopped</IN>

<IN>1 Ripe tomato; chopped</IN>

<IN>Mexican salsa</IN>

<PR>Place the beans in a saucepan and mash with a potato masher. Add the cooked rice, spices, and water. Heat 5 to 10 minutes. Meanwhile, prepare the vegetables. Heat the tortillas quickly (just to soften) in a preheated skillet, toaster oven, or microwave. Place a line of bean mixture down the middle of each tortilla. Top with lettuce, scallions, tomato, and salsa. Tuck in the top and bottom edges, roll into a burrito, and serve immediately, topped with additional salsa if desired.</PR>

</RECIPE>

Exercise queries:

Q1: Cook a main dish with meat and cauliflower.
(Main focus: type of ingredients, type of meal)

Q2: I would like to have a nut-free cake.
(Main focus: dietary practice)

Q3: Prepare a Chinese dessert with fruit.
(Main focus: type of cuisine)

Q4: Cook a main dish with turkey, pistachio, and pasta.
(Main focus: similarity / modification of recipes)

Q5: I would like to cook eggplant soup.
(Main focus: similarity / modification of recipes)

Compulsory Task:

- It involves answering queries that require the selection and possibly modification of a recipe for a single dish.
- Queries should be answered based on the given database of recipes through a selection with or without modification, for feasibility reasons, restricted to the exchange of an ingredient.

Negation Challenge:

- It is to answer queries that involve avoiding certain ingredients, which you don't like or which are not available. This can be done, by selecting an appropriate recipe or by replacing or removing some ingredients from a recipe.
- For those who aim to process the textual input of the queries directly, we give the hint that the sentiment vocabulary may be restricted by manual rephrasing. The exercise query is as follows:

Q6: I want to have a salad with tomato but I hate garlic and cucumber.

Menu Challenge:

- This requires the composition of a three-course menu based on the available recipes. The exercise query is as follows:

Q7: I do have a filet of beef, carrots, celery, field garlic and cucumber. Potatoes are available, too. For the dessert, we have oranges and mint. A soup would be preferable for the starter.

The evaluation criteria:

- Culinary quality of the created recipes:
 - appropriate to the query
 - tasty
 - cookable
 - creative
- Technical quality of the software:
 - usability
 - maintainability
 - performance and scalability
- Scientific originality of the approach:
 - to which extent it goes 'beyond retrieval', e.g. by adaptation
 - whether it is overcoming the state of the art, e.g. by a technical innovation or by a novel combination of technologies

Competition Procedure and Timeline:

June 2, 2008: Qualifying Examination

To this deadline, the contest participants must submit:

- an up-to-10-page technical description of the system,
- the URL of the running system (web interface) or the executable software (must run on Windows)
- the system results for the first set of queries.
- In a peer review process, the submitted papers and the systems will be evaluated, and the best contestants are selected for participation in the final. The finalists may – of course – continue to improve their systems for the final.

Contd..

- ***August 1, 2008: Publication of the contest recipes***

An extended database including additional recipes will be published four weeks prior to the contest. The extended database must be used for all queries in the competitions' final. The contest participants must update their system to include the new recipes.

Sept. 1, 2008. Computer Cooking Contest

- The finalist systems are demonstrated at the Computer Cooking Contest at ECCBR.
- At least one person per finalist must register for ECCBR, demonstrate the system, and give a technical presentation at the CCC workshop.
- The technical descriptions of the finalist systems will be published in the ECCBR workshop proceedings.
- The systems are evaluated according to the initial set of queries and a confidential set of new queries. The new queries are different, but similar in type and difficulty to the first set. The evaluation will be performed by an international jury.
- Separate prizes will be awarded for the compulsory tasks and for the two challenges.

Statement of Interest:

- Everybody interested in participating at the CCC should visit:

“www.computercookingcontest.net”

and subscribe to the mailing list through which all relevant information will be communicated.