

## Development of multiple choice question (MCQ) pool software

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### Background

Whereas multiple choice question (MCQ) test is one of the best assessment for medical students, collection of the items is needed for creation of a test in each examination. MCQ items sent by medical teachers should be confirmed by medical assessment committee. Then selection of MCQ items depending on topics and subtopics should be done for each new test. All these tasks should gain benefits from an online software as pooling of MCQ items for medical teachers.

### Summary of work

5 options one best answer MCQ pool software is designed for working online all of the tasks in creation of MCQ test including sending, editing, confirmation, collecting and selecting items. Development tools include Appflower RAD framework (based on Symphony 1.4), PHP scripts and MySQL database.

### Summary of results

An online web application for MCQ pool is developed with full features including the following tasks: sending items from medical teachers, editing and confirmation by medical assessment committee, selecting items depend on varying amount needed by designed topic and subtopic, re-arranging options within each items, creating of MCQ test for a new examination and advanced security for working online securely.

### Conclusions

An online web-based application for working with MCQ test should help medical teachers creating there MCQ test easily and rapidly with reliable and advanced security.

### Take-home message

This MCQ pool software will be released as GPL open source application soon. Public collaboration in development of the tool should be benefits for all of medical teachers.

### Keywords

Curriculum: Evaluation

Assessment: Computer-based assessment

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