

Quizmaster

Assignment 5

Kai Arne S. Myklebust, Silvan Adrian

Handed in: October 17, 2018



Contents

1	Solution	1
1.1	Files	1
1.2	Running the programm	2
1.3	Running the tests	2
2	Implementation	2
2.1	Gen-Statem	2
2.2	Data Structure	4
2.3	Editable state	4
2.4	Between_questions state	4
2.5	Active_question state	4
3	Assessment	4
3.1	Scope of Test Cases	4
3.2	Correctness	4
3.3	Code Quality	4
A	Code Listing	4

1 Solution

1.1 Files

All Files are situated in the **src/** folder:

- **flamingo.erl** The flamingo server implementation

- **greetings.erl** The greetings module implementation
- **hello.erl** The hello module implementation
- **mood.erl** Mood module implementation
- **counter.erl** Counter module implementation
- **test_xxx.erl** Tests for each module

1.2 Running the programm

Out of convenience we used a Emakefile which compiles all the erlang files in one go then rather compile each file on it's own. This can be done by using the erlang shell and run:

```
1 make:all([load]).
```

1.3 Running the tests

The tests can be run with eunit, we included tests for each module in a own file. Example running tests for flamingo:

```
1 eunit:test(test_flamingo, [verbose]).
```

2 Implementation

2.1 Gen-Statem

Since the Quizmaster can be seen as a simple State machine we chose gen_statem. The Quizmaster has overall 3 important states:

- `editable`
- `between_questions`
- `active_question`

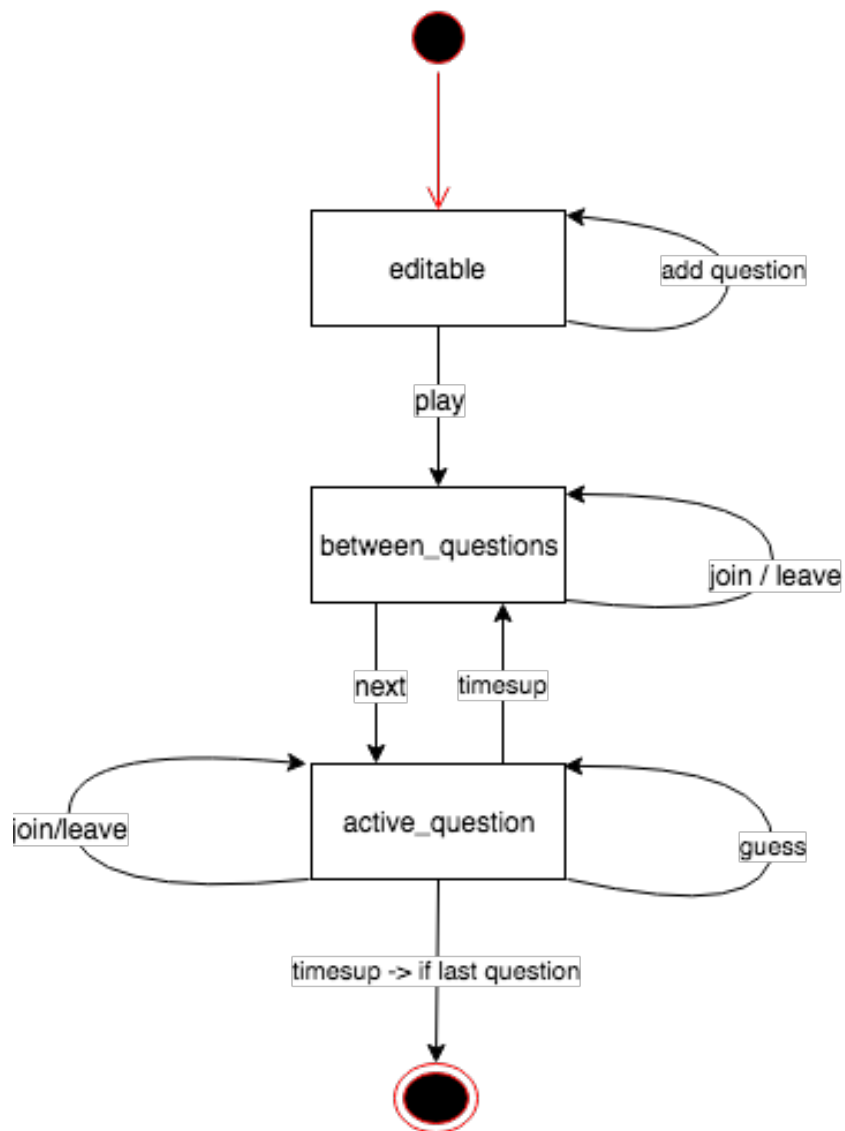


Figure 1: Simple drawing of quizmaster state machine

2.2 Data Structure

2.3 Editable state

2.4 Between_questions state

2.5 Active_question state

needs to be improved

3 Assessment

3.1 Scope of Test Cases

3.2 Correctness

3.3 Code Quality

A Code Listing