**Marker WebApp Overall Model**

The overall model has been developed to reflect the follow requirements gathered from our client and throughout our assessment. It is expected:

* A login page for the marker
* Markers have limited access to features of the web application.

**The interface is expected to have:**

* A ‘correct’ button.
* An ‘incorrect’ button. (There **is no need to a wrong button as the amount of attempts for each team is irrelevant for the competition**). Replaced by undo button
* A ‘pass’ button.

**Unclear or must be revised:**

* Buttons must be time-delayed so the judge must hold the button down for at least 2 seconds before input is sent to the database. (**This requirement must be further discussed**).
* Buttons must display a confirmation when data is sent to the database. (Confirmation from marker is required. What kind of confirmation is needed from the database).
* Buttons must deactivate when data is sent.
* Buttons must reactivate when the user lifts their finger/cursor off the button.

**Who**

A marker is a member of the organizer team. A desired user for the Web Application. Usually a teacher or a person involved with AMA or MATHEX.

**What**

Markers are responsible for marking the answer of each team that they are assigned to. Each marker usually marks two teams.

Markers also give out the questions whenever it is appropriate.

**How**

The marker hands the question to a team who eventually return with an answer. If the answer is correct, the marker will mark it as ‘correct’. The marker will then hand the student the next question to answer. This process continues until there are no more questions or the competition time runs out. In case an answer is wrong the team has the choice to attempt am answer again or pass. If the team passes, the next question is given and the marker notes it down as a pass.

**Diagrams**

**Sequence diagram –** shows the required actions from the marker all the way to the database. It illustrates the login process, the selection of teams to mark, the process of choosing a selected team to mark and the possible interactions from the marker with the webpage.

**Activity diagram** – Shows only the possible actions the marker has.

**State diagram** – shows all states the webpage will hold as a result of each action performed by the marker.

**Initial prototype design** – retrieved from the initial paper prototype example to illustrate the suggested design for the marker’s interface. **This diagram is for support only.**

**Marker interaction with webApp walk through**

Markers are standard users of the application until they have logged in. In order to login, markers must access the login page. The login page can be reached by selecting ‘privileged user’ as the type of user. They must enter in the correct credentials to login.

When logged-in, markers should be presented with a marker’s home page where they can select teams they want to mark. The number of teams to mark are usually 1 to 2, but should be allowed more if required. Marker are allowed to deselect teams from the list.

Each team will have its page for marking. A team’s page shows the question number and the question in which a team is currently answering. The answer will be revealed when required. There will be three actions available in each page:

* A way to confirm a team has got a correct answer
* A way to pass a team to the next stage (question)
* A way that markers can return (undo) previous questions

Markers will transit to or from teams’ pages as long as the teams have been selected to be marked.

Further requirements:

* Markers can choose teams they want to mark (alternatively, the admin can pre-set them)
* Markers cannot choose already assigned teams to be marked