

Quiz Master Gaming

Developers Guide API v1.5

1st July 2015

This document details the RESTful – JSON
Quiz Master API for developing interactive
multiplayer quiz apps.

© {tcc} TheCodeCentre.co.uk

Table of Contents

1	Introduction	4
2	API Access and Security	4
2.1	Resources	4
2.2	Authentication	5
3	Summary of API Interactions	5
3.1	Quizmaster Interactions (/qm)	5
3.2	Authentication Interactions (/qmauth)	6
3.3	Games (/qmgames).....	6
3.3.1	Setting up a game	7
3.3.2	Game play control.....	7
3.3.3	Game Updates	8
3.3.4	Review and updates game questions	8
3.4	Contestants (/qmcontestants).....	9
3.5	Questions (/qmquestions)	9
4	API Details	10
4.1	Quizmaster Resources	10
4.1.1	Register a new quizmaster.....	10
4.1.2	Reset quizmaster password	11
4.1.3	Get quizmaster details	11
4.1.4	Edit quizmaster details.....	12
4.1.5	Delete quizmaster	12
4.2	Authentication and Access Tokens	13
4.2.1	Authenticate a quizmaster.....	13
4.2.2	Authenticate a contestant	13
4.3	Game Resources (for Quizmaster Interaction)	14
4.3.1	Create a new game	14
4.3.2	Add contestant to a game.....	14
4.3.3	Show all contestant for a game	15
4.3.4	Start a game	15
4.3.5	Show next question.....	16
4.3.6	Finish game	17
4.3.7	Get the scores for a finished game	17

4.3.8	Edit an existing game	18
4.3.9	Delete a game	18
4.3.10	Edit existing contestant details	19
4.3.11	Delete contestant.....	19
4.3.12	Review game questions	19
4.3.13	Replace game question.....	20
4.3.14	Add a new question	20
4.3.15	Delete a question	21
4.4	Contestant Resources (for Contestant/Team Interaction)	21
4.4.1	Contestant details	21
4.4.2	Get current question.....	21
4.4.3	Submit an answer	22
4.4.4	Get the scores	23
4.5	Question Resources	23
4.5.1	Question categories, subcategories and type.....	24
4.5.2	GET question categories, sub-categories and difficulties	24
4.5.3	Get question details	25
4.5.4	Create a question.....	26

1 Introduction

Quiz Master is a cloud based service that provides an environment to set up and play pub quiz style games with one quiz master setting up and controlling questions for a number of participant contestants or quiz teams.

Interaction with the service is via a RESTful API. The API provides the quiz master the ability to control questions and contestants for a game and for each contestant the ability to participate in a specific game.

The cloud service currently includes approximately 3000 questions and possibility to add own set of questions if desired. The question file format can be found in section 5. Any questions please email admin@thecodecentre.co.uk.

2 API Access and Security

Access to the API requires registration and a valid app id. You can register your app and obtain an app id at:

<https://tcc-quizmaster.appspot.com/quizmaster.jsp>

The registration process uses OpenID via Facebook or Google (<http://en.wikipedia.org/wiki/OpenID>) The app id is used to monitor usage stats and rate limiting purposes and is only required when registering or authenticating a quizmaster via the API (see 3.xxx below). The app secret is currently not used.

The API service is accessed via the URL <https://tcc-quizmaster.appspot.com/apiv1/>. All responses will use the JSON standard UTF-8 character set with the HTTP mime *content-type* set to:

```
Content-Type: application/json
```

To overcome the same origin policy when using AJAX, the responses will support CORS (http://en.wikipedia.org/wiki/Cross-origin_resource_sharing) and include the following in each HTML response header:

```
Access-Control-Allow-Origin: *
```

```
Access-Control-Allow-Headers: Content-Type, Authorization
```

```
Access-Control-Allow-Methods: PUT, GET, POST, DELETE, OPTIONS
```

2.1 Resources

The API service provides a specific resource for all authentication which is then required to access the other 4 actual resources:

Quizmaster: accessed via /qm

Authentication: accessed via /qmauth

Games: accessed via /qmgames

Contestants: accessed via /qmcontestants

Questions: accessed via /qmquestions

The high level summary of the message flows are shown in section 3.

2.2 Authentication

All access to the API require a valid access token (except initial registration). An access token can be obtained by authenticating the user (quizmaster or contestant) using HTTP Basic Access Authentication header (see http://en.wikipedia.org/wiki/Basic_access_authentication). Section 4.1 details the request and response fields.

```
Authorization: Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==
```

For quizmaster authentication (for quizmaster to setup and control a game) the characters after the word **Basic** above is the base64 encoded string of the quizmaster's "*name:password*".

For contestant authentication (i.e. when they a contestant want to play a specific game), the characters after the word **Basic** above is the base64 encoded string of the contestant's "*game name:contestant name:access code*".

If the correct authentication details are not present in the HTTP header then the API will respond with a HTTP 401 Unauthorised status code.

If the authentication details are correct the API will respond with an access token in a JSON message (see 4.1). This access token should be used in all subsequent API interactions using the "Bearer" authorisation type:

```
Authorization: Bearer <access token>
```

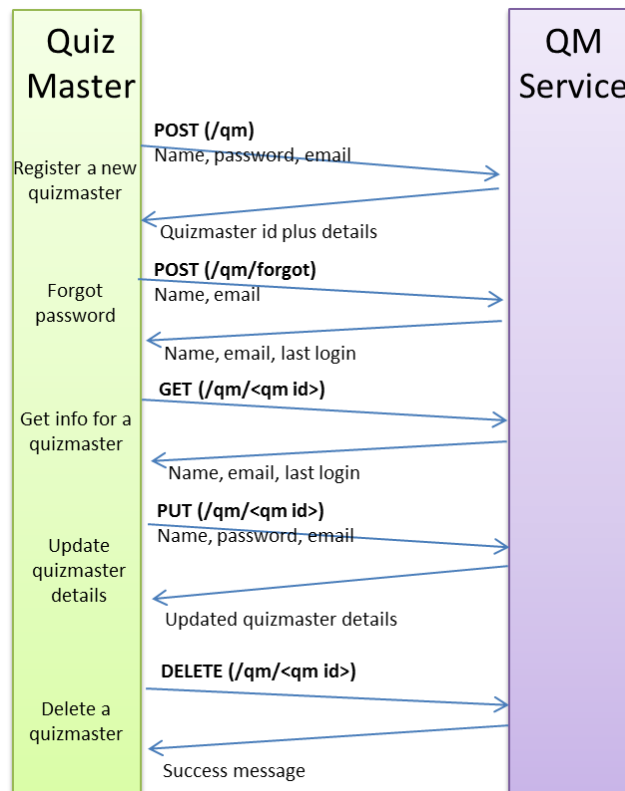
The access token will expire after 24 hours, after which the user needs to obtain a new access token by re-authenticating.

3 Summary of API Interactions

There are 4 types of resources provided by the API. Access to these resources require an access token which can be obtained by authenticating the user. Further details on the request and response details can be found in section 4.

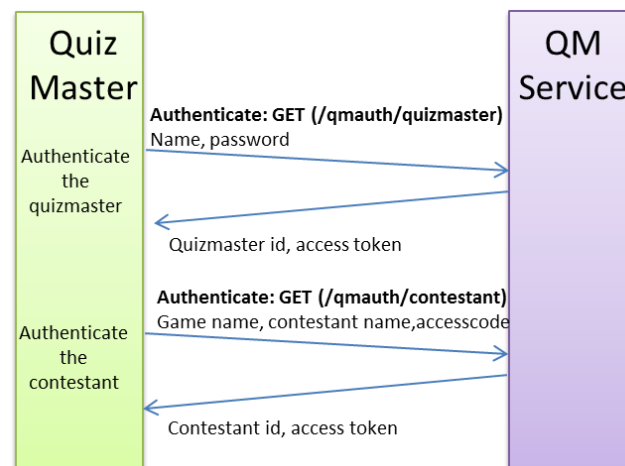
3.1 Quizmaster Interactions (/qm)

These interactions are to register a new (add) or edit quizmaster details. Edit and delete interactions require a valid quizmaster access token. Initial registration and forgot password interactions require no authentication.



3.2 Authentication Interactions (/qmauth)

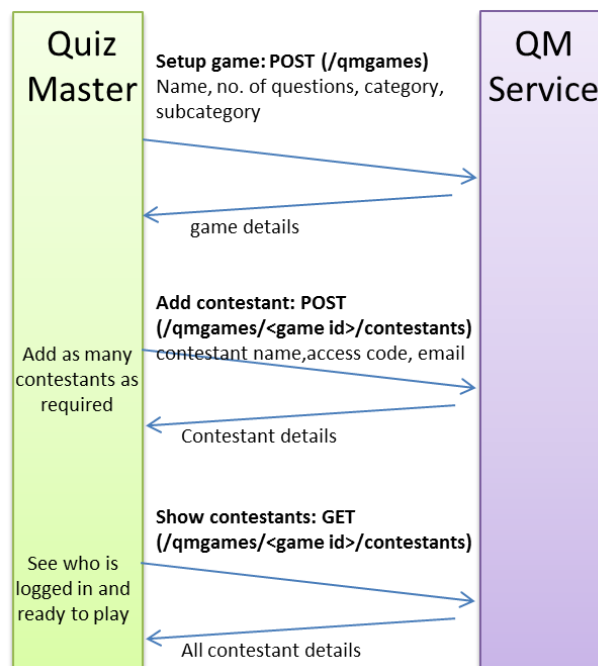
Used to authenticate a user and obtain an access token.



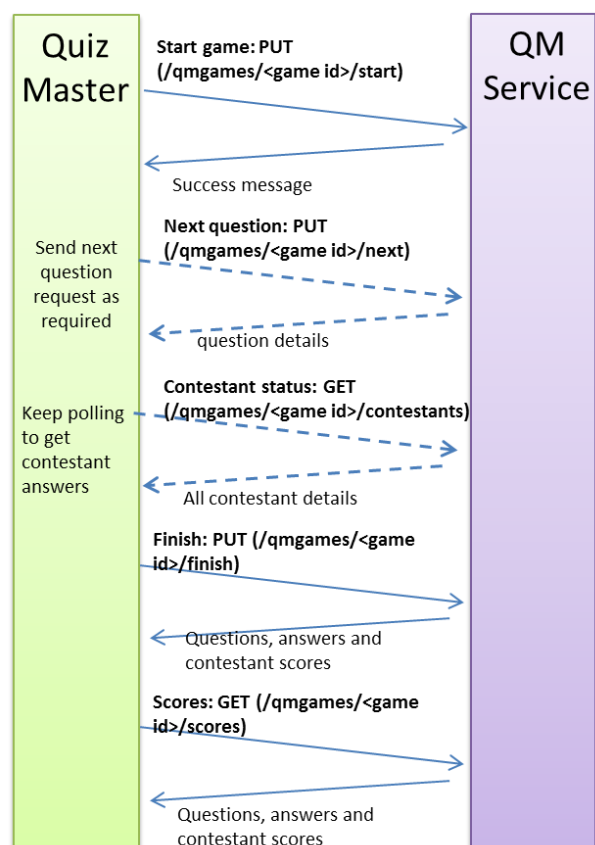
3.3 Games (/qmgames)

All access to this resource require a valid quizmaster access token.

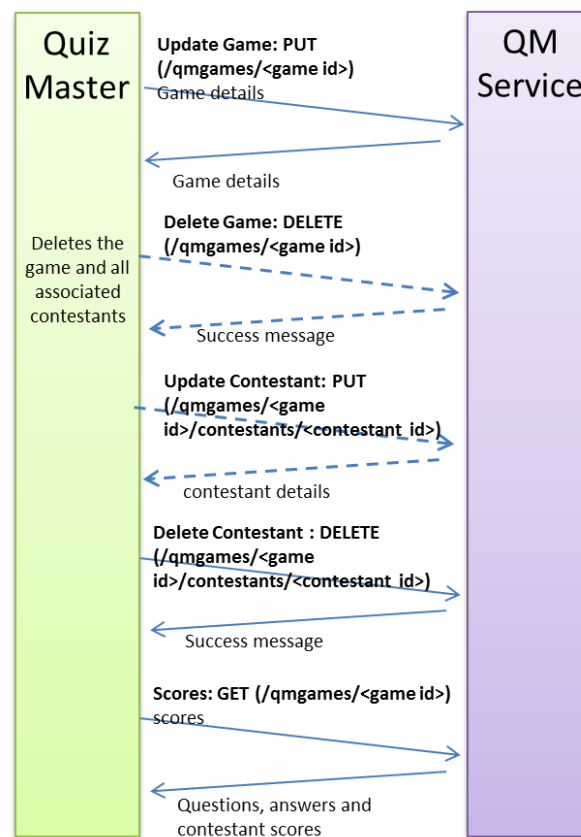
3.3.1 Setting up a game



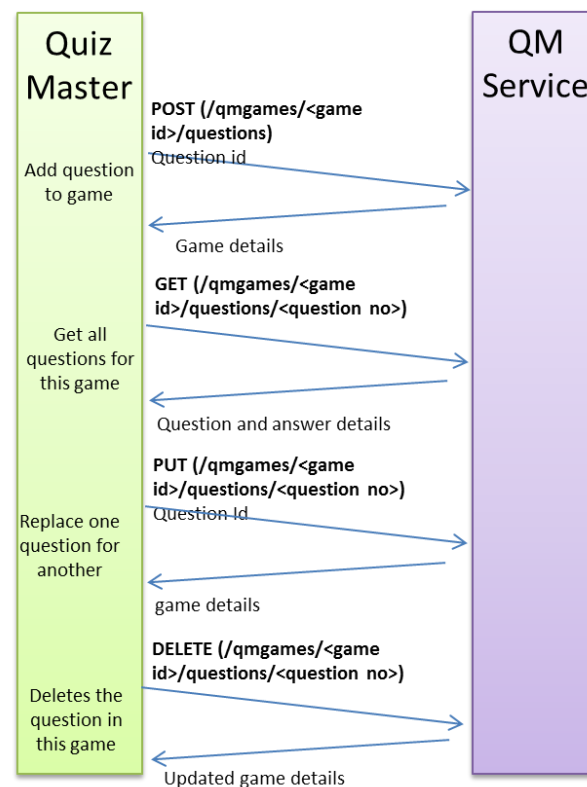
3.3.2 Game play control



3.3.3 Game Updates

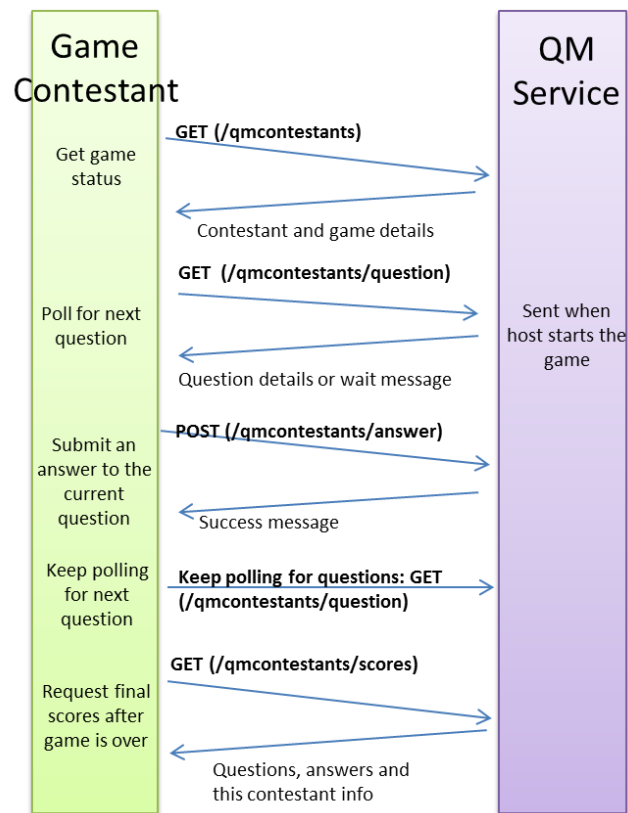


3.3.4 Review and updates game questions



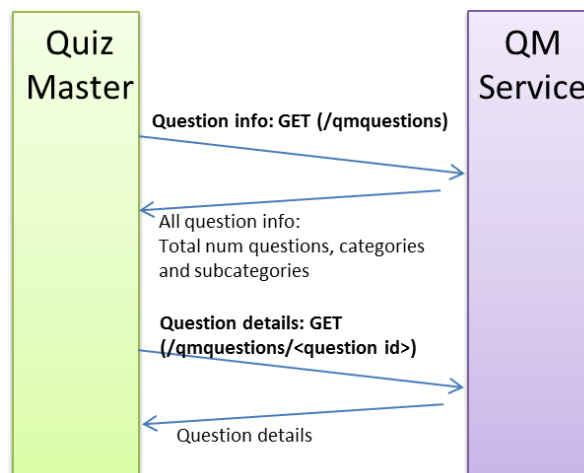
3.4 Contestants (/qmcontestants)

For contestant participation in a game. Requires a valid contestant access token.



3.5 Questions (/qmquestions)

For browsing through each question. Requires a valid quizmaster access token.



4 API Details

The service is accessed via the URL <https://tcc-quizmaster.appspot.com/apiv1/>.

In case of an error the API will return the standard Quiz Master JSON error message with a message and description field e.g.:

```
{ "error":  
  { "message": "QM Questions", "description": "Question id does not exist"}  
}
```

It is recommended that your app use the *description* field to notify your app user of the error.

All POST and PUT API requests should be in standard html form format and have the *Content-Type* field set to:

application/x-www-form-urlencoded

4.1 Quizmaster Resources

Details of quizmaster resources for creating, editing and deleting quizmasters. The quizmaster names have to be unique per app id.

4.1.1 Register a new quizmaster

Description	Register a new game host or quizmaster. This name and email has to be unique per app id. The name and email are case insensitive so <i>Quizmaster1</i> is the same as <i>quizmaster1</i> . The password is case sensitive.
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qm?app_id=<your app id>">https://tcc-quizmaster.appspot.com/apiv1/qm?app_id=<your app id>
Method	POST
Parameters	Quizmaster details in standard HTML form qmname=<name of quizmaster or host name> e.g. quizmaster1 qmemail=<host email address> e.g. admin@thecodecentre.co.uk qmpassword=<8 to 20 char password> Plus the app id in the url: app_id= <your app id>
Response	Confirmation of quizmaster details. <pre>{ "quizmasterId": 5654313976201216, "applicationId": 51500012345 , "quizmasterName": "quizmaster1", "quizmasterEmail": " admin@thecodecentre.co.uk", "lastLogin": "April 15, 2015 4:20:30 PM", "lastIPAddr": "192.168.0.23" }</pre> Where: quizmasterId is the unique quizmaster id for this quizmaster applicationId is the application id used

	quizmasterName is the registered name of this quizmaster quizmasterEmail is the registered email for this quizmaster
Errors	Standard Quiz Master API JSON error message

4.1.2 Reset quizmaster password

Description	To reset quizmaster password which will be emailed to the registered quizmaster email.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qm/forgot?app_id=<your app id>
Method	POST
Parameters	Quizmaster details in standard HTML form. Only one is necessary. qmname=<name of quizmaster or host name> e.g. quizmaster1 qmemail=<host email address> e.g. admin@thecodecentre.co.uk Plus the app id in the url: app_id= <your app id>
Response	Quiz Master API JSON success message provided qmname or email is correct { "success": { "message": "success", "description": "A new password has been emailed to you" } }
Errors	Standard Quiz Master API JSON error message

4.1.3 Get quizmaster details

Description	Get quizmaster details for info and stats purposes.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qm/<qm id>
Method	GET with HTTP Bearer token authorization header
Parameters	app_id= <your app id> in the URL
Response	Quiz Master information { "quizmasterId": 5654313976201216, "applicationId": 51500012345, "quizmasterName": "quizmaster1", "quizmasterEmail": "admin@thecodecentre.co.uk", "lastLogin": "Sun 23 April 2015", "lastIPAddr": "192.168.0.23" }
Errors	Standard Quiz Master API JSON error message

4.1.4 Edit quizmaster details

Description	Edit the quizmaster details. The quizmaster and application id and will always remain the same.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qm/<qm id>
Method	PUT with HTTP Bearer token authorization header
Parameters	Quizmaster details in standard HTML form qmname=<name of quizmaster or host name> e.g. quizmaster1 qmemail=<host email address> e.g. admin@thecodecentre.co.uk qmpassword=<8 to 20 char password> Plus the app id in the url: app_id= <your app id>
Response	Confirmation of updated quizmaster details. <pre>{"quizmasterId":5654313976201216,"applicationId":"51500012345","quizmasterName":"quizmaster1","quizmasterEmail":"admin@thecodecentre.co.uk","lastLogin":"April 15,2015 4:20:30 PM ","lastIPAddr":"192.168.0.23"}</pre> Where: quizmasterId is the unique quizmaster id for this quizmaster applicationId is the application id used quizmasterName is the registered name of this quizmaster quizmasterEmail is the registered email for this quizmaster
Errors	Standard Quiz Master API JSON error message

4.1.5 Delete quizmaster

Description	Delete the registered quizmaster
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qm/<qm id>
Method	DELETE with HTTP Bearer token authorization header
Parameters	None
Response	Quiz Master API JSON success message <pre>{"success":{"message":"success","description":"Quizmaster deleted"}}</pre>
Errors	Standard Quiz Master API JSON error message

4.2 Authentication and Access Tokens

Details of interactions to obtain an access token.

4.2.1 Authenticate a quizmaster

Description	Authenticate the quizmaster and obtain an access token. This is the first step to setting up and playing the quiz.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmauth/quizmaster?app_id=nnnnn
Method	GET with HTTP Basic Authentication in base64 format of: <i><quizmaster name>:<password></i>
Parameters	app_id= <i><your app id></i> in the URL
Response	Access token in JSON message. E.g. <pre>{"user_id":5654313976201216,"access_token":"phgNUhdk76UYDjhh doKM","expires_in":86400,"token_type":"Bearer"}</pre> Where: user_id is the unique quizmaster id for this quizmaster access_token is the token that should be used in all subsequent API interactions expires_in is the validity of this token in seconds - default is 86400 (24 hours) token_type will always be "Bearer"
Errors	Standard Quiz Master API JSON error message

4.2.2 Authenticate a contestant

Description	Authenticate the contestant and obtain an access token. This is required to join a quiz and start playing.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmauth/contestant?app_id=nnnnn
Method	GET with HTTP Basic Authentication in base64 format of: <i><game name>:<contestant name>:<access code></i>
Parameters	app_id= <i><your app id></i> in the URL
Response	Access token in JSON message. E.g. <pre>{"user_id":6069304185323520,"access_token":"phgNUhdk76UYDjhh doKM","expires_in":86400,"token_type":"Bearer"}</pre> Where:

	user_id is the unique contestant id for this contestant access_token is the token that should be used in all subsequent API interactions expires_in is the validity of this token in seconds - default is 86400 (24 hours) token_type will always be "Bearer"
Errors	Standard Quiz Master API JSON error message

4.3 Game Resources (for Quizmaster Interaction)

The games resources are used by the quizmaster for setting up and controlling games.

4.3.1 Create a new game

Description	Set up a new game. The returned game id should be saved for all game interaction.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames
Method	POST with HTTP Bearer token authorization header
Parameters	None
POST data	Game details in standard HTML form qmgname=<name of quiz or game event> e.g. mypubquiz1 qmgcat=<category for the questions> e.g. SCIENCE qmgsubcat=<subcategory for the questions> e.g. GENERAL qmgdiff=<difficulty of the questions> EASY or MEDIUM or HARD qmgnumqu=<number of questions> e.g. 4
Response	Game details including all contestant info <pre>{ "gameId":5654313976201216, "gameName":"mypubquiz1", "hostId":5732568548769792, "numQuestions":4, "timeLimit":0, "gameStatus":0, "category":"SCIENCE", "subCategory":"GENERAL", "difficulty":"EASY", "questionMethod":"MANUAL", "questionList":[19712116,19712090,19712107,19712080], "contestants":{"numContestants":0, "contestants":[] }}</pre>
Errors	Standard Quiz Master API JSON error message

4.3.2 Add contestant to a game

Description	Add a contestant or team to the game
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/contestants">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/contestants
Method	POST with HTTP Bearer token authorization header

Parameters	None
POST data	Contestant details in standard HTML form. contestantname=<name of this contestant> qmacesscode=<access code or password for this contestant to join the game> contestantemail=<contestant email>
Response	Contestant details { "contestantId": 6069304185323520, "gameId": 5654313976201216, "contestantName": "Blueteam", "accessCode": "bluecode", "email": "blueteam@test.com", "status": "OFFLINE", "answers": ["", "", "", ""], "score": [0, 0, 0, 0] }
Errors	Standard Quiz Master API JSON error message

4.3.3 Show all contestant for a game

Description	Show all contestants for a game including any submitted answers. This request should be polled every 3 to 4 seconds for the quiz master to track responses from the contestants.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/contestants
Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	All contestants set up for this game { "numContestants": 2, "contestants": [{ "contestantId": 6069304185323520, "gameId": 5654313976201216, "contestantName": "Blueteam", "accessCode": "bluecode", "email": "blue@test.com", "status": "OFFLINE", "answers": ["", "", "", ""], "score": [0, 0, 0, 0] }, { "contestantId": 5739407210446848, "gameId": 5654313976201216, "contestantName": "Redteam ", "accessCode": "redcode", "email": "red@test.com", "status": "OFFLINE", "answers": ["", "", "", ""], "score": [0, 0, 0, 0] }] }
Errors	Standard Quiz Master API JSON error message

4.3.4 Start a game

Description	Start a game
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/start

Method	PUT with HTTP Bearer token authorization header
Parameters	none
Response	Quiz Master API JSON success message <pre>{"success":{"message":"Success","description":"Game started"}}</pre>
Errors	Standard Quiz Master API JSON error message

4.3.5 Show next question

Description	Scroll to next question in a game
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/next">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/next
Method	PUT with HTTP Bearer token authorization header
Parameters	None
Response	<p>The question to show each contestant</p> <pre>{"questionId":19712107,"questionNo":3,"numQuestions":4,"timeLimit":0,"category":"SCIENCE","subCategory":"GENERAL","type":"TEXT","question":"What is Acetic Acid more commonly known as?","imageUrl":""}</pre> <p>Some questions include an image. The location of the image will be shown in the imageUrl field. Paths are all relative to the API url (https://tcc-quizmaster.appspot.com/). E.g.</p> <pre>{"questionId":19712906,"questionNo":2,"numQuestions":3,"timeLimit":0,"category":"GEOGRAPHY","subCategory":"FLAGS","type":"TEXT","question":"Which country is this the flag of?","imageUrl":"resources/flags/qm-flags-3.jpg"}</pre> <p>If the question type is MULTICHOICE then an additional options parameter is provided which includes a list of the possible options. These options should be rendered in order with the letter prefix starting at “a”, then “b” and so on. E.g.</p> <pre>{"questionId":19711906,"questionNo":2,"numQuestions":4,"timeLimit":0,"category":"ANIMALS","subCategory":"GENERAL","type":"MULTICHOICE","question":"An octopus has how many hearts?","options":["4","2","6","8"],"imageUrl":""}</pre> <p>This should be displayed as:</p> <p>Q: An octopus has how many hearts?</p> <p>A: a:4 b:2 c:6 d:8</p>

	Enter a, b, c or d. Submitted answer should be a, b, c or d not 4, 2, 6, or 8.
Errors	Standard Quiz Master API JSON error message

4.3.6 Finish game

Description	Finish the game and show the results
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/finish">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/finish
Method	PUT with HTTP Bearer token authorization header
Parameters	None
Response	<p>Ends the game and shows correct answer plus answers submitted by each contestant.</p> <pre>{ "numQuestions": 4, "questions": [{ "questionNo": 1, "questionId": 19712116, "question": "Sugar found in fruit is known by what name?", "answer": "Fructose" }, { "questionNo": 2, "questionId": 19712090, "question": "What founding father was knocked unconscious while attempting to electrocute a turkey?", "answer": "Benjamin Franklin" }, { "questionNo": 3, "questionId": 19712107, "question": "What is Acetic Acid more commonly known as?", "answer": "Vinegar" }, { "questionNo": 4, "questionId": 19712080, "question": "What's the only metal that's not a solid at room temperature?", "answer": "Mercury" }], "numContestants": 1, "contestants": [{ "contestantId": 6069304185323520, "contestantName": "Blueteam", "answers": ["fructose", "john smith", "acetic acid", "mercury"], "scores": [1, 0, 1, 1] }, { "contestantId": 5739407210446848, "contestantName": "Redteam", "answers": ["fructose", "faraday", "acetic acid", "lead"], "scores": [1, 0, 1, 0] }] }</pre>
Errors	Standard Quiz Master API JSON error message

4.3.7 Get the scores for a finished game

Description	Show the final results for a game that has finished
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>
Method	GET with HTTP Bearer token authorization header
Parameters	None

Response	Correct answers to each question plus answers submitted by each contestant. As 4.2.6 above.
Errors	Standard Quiz Master API JSON error message

4.3.8 Edit an existing game

Description	Edit (update) an existing game. Requires the game id.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>
Method	PUT with HTTP Bearer token authorization header
Parameters	None
PUT data	Game details in standard HTML form qmgname=<name of quiz or game event> e.g. mypubquiz1 qmgcat=<category for the questions> e.g. SCIENCE qmgsubcat=<subcategory for the questions> e.g. GENERAL qmgnumqu=<number of questions> e.g. 4
Response	Updated game details { "gameId":5654313976201216, "gameName": "mypubquiz1", "hostId": 5732568548769792, "numQuestions":4, "timeLimit":0, "gameStatus":0, "category": "SCIENCE", "subCategory": "GENERAL", "questionMethod": "MANUAL", "questionList": [19712116, 19712090, 19712107, 19712080], "contestants": { "numContestants":0, "contestants": [] } }
Errors	Standard Quiz Master API JSON error message

4.3.9 Delete a game

Description	Delete a game
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>
Method	DELETE with HTTP Bearer token authorization header
Parameters	None
Response	Quiz Master API success message
Errors	Standard Quiz Master API JSON error message

4.3.10 Edit existing contestant details

Description	Edit (update) an existing contestant or team
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/contestant/<contestant id>
Method	PUT with HTTP Bearer token authorization header
Parameters	None
PUT data	Contestant details in standard HTML form. contestantname=<name of this contestant> qmacesscode=<access code for this contestant to join the game> contestantemail=<contestant email>
Response	Updated contestant details { "contestantId": 6069304185323520, "gameId": 5654313976201216, "contestantName": "Blueteam", "accessCode": "bluecode", "email": "blueteam@test.com", "status": "OFFLINE", "answers": ["", "", "", ""], "score": [0, 0, 0, 0] }
Errors	Standard Quiz Master API JSON error message

4.3.11 Delete contestant

Description	Delete a contestant or team
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/contestant/<contestant id>
Method	DELETE with HTTP Bearer token authorization header
Parameters	None
Response	Quiz Master API success message
Errors	Standard Quiz Master API JSON error message

4.3.12 Review game questions

Description	Review game questions. Can be used by the quizmaster before he starts a game for familiarity
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions/<question no>

Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	<p>Question details</p> <pre>{ "questionId": 19712411, "used": 0, "correct": 0, "category": "MOVIES", "subCategory": "ACTORS", "difficulty": "EASY", "type": "TEXT", "question": "Name this actor", "imageUrl": "resources/actors/qm-actors-008.jpg", "answer": "Kevin Spacey" }</pre>
Errors	Standard Quiz Master API JSON error message

4.3.13 Replace game question

Description	Replace the question with another. Useful during review in case the question is not appropriate
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions/<question no>">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions/<question no>
Method	PUT with HTTP Bearer token authorization header
Parameters	questionid=<question id> e.g. 19711299
Response	<p>Question details</p> <pre>{ "questionId": 19711299, "used": 0, "correct": 0, "category": "MISC", "subCategory": "GENERAL", "difficulty": "HARD", "type": "TEXT", "question": "What U.S. state boasts the most car owners?", "imageUrl": "", "answer": "California" }</pre>
Errors	Standard Quiz Master API JSON error message

4.3.14 Add a new question

Description	Add another question to this game. Question will be added at the end.
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions
Method	POST with HTTP Bearer token authorization header
Parameters	questionid=<question id> e.g. 19711812
Response	<p>Question details</p> <pre>{ "questionId": 19711812, "used": 0, "correct": 0, "category": "MUSIC", "subCategory": "GENERAL", "difficulty": "HARD", "type": "TEXT" }</pre>

	, "question": "Which 60s icon was backed by The Band?", "imageUrl": "", "answer": "Bob Dylan"}
Errors	Standard Quiz Master API JSON error message

4.3.15 Delete a question

Description	Delete another question from this game.
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions/<question no>">https://tcc-quizmaster.appspot.com/apiv1/qmgames/<game id>/questions/<question no>
Method	DELETE with HTTP Bearer token authorization header
Parameters	None
Response	Quiz Master API success message
Errors	Standard Quiz Master API JSON error message

4.4 Contestant Resources (for Contestant/Team Interaction)

4.4.1 Contestant details

Description	Get the authenticated contestant and game details
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmcontestants
Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	Contestant details with status set to READY {"contestantId": 6069304185323520, "gameId": 5654313976201216, "contestantName": "Blueteam", "accessCode": "bluecode", "email": "blueteam@test.com", "status": "READY", "answers": ["", "", "", ""], "score": [0, 0, 0, 0]}
Errors	Standard Quiz Master API JSON error message

4.4.2 Get current question

Description	Get the current question for this contestant. This request should be polled every 4 to 5 seconds.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmcontestants/question

Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	<p>The current question for this game</p> <pre>{ "questionId":19710769, "questionNo":3, "numQuestions":3, "timeLimit":0, "category":"GEOGRAPHY", "subCategory":"GENERAL", "type":"TEXT", "question":"What are the Islas Canarias in English?", "imageUrl":"" }</pre> <p>Some questions include an image. The location of the image will be shown in the imageUrl field. Paths are all relative to the API url (https://tcc-quizzmaster.appspot.com/). E.g.</p> <pre>{ "questionId":19712906, "questionNo":2, "numQuestions":3, "timeLimit":0, "category":"GEOGRAPHY", "subCategory":"FLAGS", "type":"TEXT", "question":"Which country is this the flag of?", "imageUrl":"resources/flags/qm-flags-3.jpg" }</pre> <p>If the question type is MULTICHOICE then an additional options parameter is provided which includes a list of the possible options. These options should be rendered in order with the letter prefix starting at “a”, then “b” and so on. E.g.</p> <pre>{ "questionId":19711906, "questionNo":2, "numQuestions":4, "timeLimit":0, "category":"ANIMALS", "subCategory":"GENERAL", "type":"MULTICHOICE", "question":"An octopus has how many hearts?", "options":["4","2","6","8"], "imageUrl":"" }</pre> <p>This should be displayed as:</p> <p>Q: An octopus has how many hearts?</p> <p>A: a:4 b:2 c:6 d:8</p> <p>Enter a, b, c or d.</p> <p>Submitted answer should be a, b, c or d not 4, 2, 6, or 8.</p>
Errors	Standard Quiz Master API JSON error message

4.4.3 Submit an answer

Description	Submit an answer for the latest question
URL Structure	https://tcc-quizzmaster.appspot.com/apiv1/qmcontestants
Method	POST with HTTP Bearer token authorization header
Parameters	None
POST data	Contestant answer in HTML form

	answer=<the answer>
Response	Quiz Master API JSON success message <pre>{"success":{"message":"Success","description":"Your answer has been registered"}}</pre>
Errors	Standard Quiz Master API JSON error message

4.4.4 Get the scores

Description	Get the final scores for the game after it has finished
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmcontestants/scores
Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	Shows correct answers to each question plus answers submitted by each contestant. <pre>{ "numQuestions": 4, "questions": [{ "questionNo": 1, "questionId": 19712116, "question": "Sugar found in fruit is known by what name?", "answer": "Fructose" }, { "questionNo": 2, "questionId": 19712090, "question": "What founding father was knocked unconscious while attempting to electrocute a turkey?", "answer": "Benjamin Franklin" }, { "questionNo": 3, "questionId": 19712107, "question": "What is Acetic Acid more commonly known as?", "answer": "Vinegar" }, { "questionNo": 4, "questionId": 19712080, "question": "What's the only metal that's not a solid at room temperature?", "answer": "Mercury" }], "numContestants": 1, "contestants": [{ "contestantId": 6069304185323520, "contestantName": "Blueteam", "answers": ["fructose", "john smith", "acetic acid", "mercury"], "scores": [1, 0, 1, 1] }, { "contestantId": 5739407210446848, "contestantName": "Redteam", "answers": ["fructose", "faraday", "acetic acid", "lead"], "scores": [1, 0, 1, 0] }] }</pre>
Errors	Standard Quiz Master API JSON error message

4.5 Question Resources

Overview of all question categories and subcategories. This service is only available to a registered quizmaster (using quizmaster credentials i.e. access token), it is not available for contestants.

4.5.1 Question categories, subcategories and type

All questions can be directly accessed using its unique id via

<https://tcc-quizmaster.appspot.com/apiv1/qmquestions/<question id>>

(see section 4.4.2). Questions are defined as follows:

questionId	Unique id of this question
used	Number of times this question has been used in a quiz
correct	Number of times this question has been answered correctly
category	Main category of this question. Categories include: <i>TV, MOVIES, SCIENCE, GEOGRAPHY, HISTORY, LITERATURE, MISC, MUSIC, ANIMALS, FOOD, RELIGION, SPORTS, VIDEOGAMES, CARTOONS, TECHNOLOGY</i>
subCategory	The sub-category of this question which include: <i>FOOTBALL, FLAGS, CAPITALS, GENERAL, CELEBRITIES, LOGOS, ALBUMCOVERS, MOVIESTARS, ACTORS, ACTRESSES, COUNTRIES, BANDLOGOS, FOODLOGOS, VILLAINS, FOURSTARS, LANDMARKS</i>
difficulty	The classified difficulty of this question. This could be one of: <i>HARD, MEDIUM, EASY</i>
type	The type of question. This could be one of: <i>TEXT</i> – Question that expects the answer to be a text string. The submitted answer is compared with the actual stored answer using Damerau-Levenshtein algorithm to determine if it is correct while allowing for spelling mistakes. <i>MULTICHOICE</i> – Question that expects the answer to be letters a, b, c or d representing the selected correct answer.
question	The question. E.g. Name the president of the USA.
image_url	The url of the image if applicable for this question.
answer	The correct answer. If type is MULTICHOICE then each potential answer will be separated by a hash (#) with the first one being the correct answer. e.g. Barak Obama#Hillary Clinton#George Bush#Mario Draghi

4.5.2 GET question categories, sub-categories and difficulties

Description	Get all question category, subcategory and difficulty info. This info should be saved by the app so that it can be used when setting up a game.
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmquestions

Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	<p>Information about all question categories and subcategories</p> <pre>{ "totalQuestions": 2937, "categories": [{ "category": "TV", "subCategories": [{ "subCategory": "GENERAL", "numQuestions": 16, "difficulty": { "HARD": 4, "MEDIUM": 4, "EASY": 8 } }] }, { "category": "MOVIES", "subCategories": [{ "subCategory": "GENERAL", "numQuestions": 219, "difficulty": { "HARD": 120, "MEDIUM": 50, "EASY": 49 } }, { "subCategory": "ACTORS", "numQuestions": 100 }, { "subCategory": "ACTRESSES", "numQuestions": 100, "difficulty": { "HARD": 40, "MEDIUM": 40, "EASY": 20 } }, { "subCategory": "VILLAINS", "numQuestions": 100, "difficulty": { "HARD": 40, "MEDIUM": 40, "EASY": 20 } }] }, { "category": "GEOGRAPHY", "subCategories": [{ "subCategory": "COUNTRIES", "numQuestions": 100, "difficulty": { "HARD": 40, "MEDIUM": 40, "EASY": 20 } }, { "subCategory": "FLAGS", "numQuestions": 100, "difficulty": { "HARD": 4, "MEDIUM": 4, "EASY": 8 } }] }, { "category": "SPORTS", "subCategories": [{ "subCategory": "FOOTBALL", "numQuestions": 169, "difficulty": { "HARD": 40, "MEDIUM": 40, "EASY": 89 } }, { "subCategory": "GENERAL", "numQuestions": 14, "difficulty": { "HARD": 4, "MEDIUM": 4, "EASY": 6 } }] }, { "category": "TECHNOLOGY", "subCategories": [{ "subCategory": "GENERAL", "numQuestions": 25, "difficulty": { "HARD": 10, "MEDIUM": 10, "EASY": 5 } }] }] }</pre>
Errors	Standard Quiz Master API JSON error message

4.5.3 Get question details

Description	Get full question details
URL Structure	<a href="https://tcc-quizmaster.appspot.com/apiv1/qmquestions/<question id>">https://tcc-quizmaster.appspot.com/apiv1/qmquestions/<question id>
Method	GET with HTTP Bearer token authorization header
Parameters	None
Response	<p>Question details</p> <pre>{ "questionId": 19712834, "used": 1, "correct": 0, "category": "GEOGRAPHY", "subCategory": "COUNTRIES", "difficulty": "MEDIUM", "type": "TEXT", "question": "Name this country", "imageUrl": "resources/countries/qm-countries-31.jpg", "answer": "Egypt" }</pre>
Errors	Standard Quiz Master API JSON error message

4.5.4 Create a question

Description	Create a question for use by the quizmaster
URL Structure	https://tcc-quizmaster.appspot.com/apiv1/qmquestions
Method	POST with HTTP Bearer token authorization header
Parameters	TBC
Response	<p>Question details</p> <pre>{"questionId":19712834,"used":0,"correct":0,"category":"GEOGRAPHY","subCategory":"COUNTRIES","difficulty":"MEDIUM","type":"TEXT","question":"Name this country", "imageUrl":"resources/countries/qm-countries-31.jpg", "answer":"Egypt"}</pre>
Errors	Standard Quiz Master API JSON error message

/*---- end of document ----*/