

Kwik Koder Rest

URL: <https://kwickkoderrest.azurewebsites.net/>

User Tests Back-End

URL: <http://20.69.69.228/typetest/>

Users

Endpoint	Input	Output	Requires Authorization	HTTP
/api/User/username	None	<pre>{ "userName": "string", "name": "string", "userId": 0, "revapoints": 0 }</pre>	Yes	GET
/api/UserStat/all	None	<pre>[{ "userID": "string", "averagewpm": 0, "averageaccuracy": 0, "numberoftests": 0, "totaltesttime": 0, "category": 0, "wins": 0, "losses": 0, "wlRatio": 0, "winStreak": 0 }]</pre>	Yes	GET
/api/UserStat/tests	None	<pre>[{ "numberofcharacters": 0, "numberoferrors": 0, "wpm": 0, "timetakenms": 0, "date": "2021-06-18T00:12:57.845Z" }]</pre>	Yes	GET
/api/UserStat/tests/all	None	<pre>[[{ "numberofcharacters": 0, "numberoferrors": 0, "wpm": 0, </pre>	Yes	

		<pre> "timetakenms": 0, "date": "2021-06-25T18:40:57.893Z", "category": 0 }], [{ "numberOfcharacters": 0, "numberOferrors": 0, "wpm": 0, "timetakenms": 0, "date": "2021-06-25T18:40:57.893Z", "category": 2 }]] </pre>		
/api/UserStat	None	<pre> { "userID": "string", "averagewpm": 0, "averageaccuracy": 0, "numberoftests": 0, "totaltesttime": 0, "category": 0, "wins": 0, "losses": 0, "wlRatio": 0, "winStreak": 0 } </pre>	Yes	GET

Details:

These endpoints read the current user's Auth0Id and uses it to find their information in the database.

GET /api/User/username :

Used to get user's username and name from Auth0 as well as their Id in the database and revapoints.

Returns: Output or a 404 if user is not found.

GET /api/UserStat/all :

Used to get current user's performance in all categories as an Ienumerable with each average performance as a separate item.

Returns: Output or a 404 if statistics are not found.

GET /api/UserStat/tests:

Used to get current user's latest 100 tests as a list of tests sorted by date (oldest to newest).

Returns: Output or a 404 if user is not found.

GET /api/UserStat/tests/all:

Used to get user's test in each category they've participated in, ordered in ascending date

Returns Output or 404 if User is not found.

GET /api/UserStat:

Used to get user's average statistics, category returned is set to be user's revapoints.

Returns: Output or a 404 if statistic is not found.

Tests

Endpoint	Input	Output	Requires Authorization	HTTP
/api/TypeTest	None	{ "content": "string", "author": "string", "length": 0, "categoryId": 0 }	No	GET
/api/TypeTest/{id}	URL: int id, Refers to category number	{ "content": "string", "author": "string", "length": 0, "categoryId": 0 }	No	GET
/api/TypeTest	{ "categoryId": 0, "numberOfcharacters": 0, "numberOferrors": 0, "wpm": 0, "timetakenms": 0, "date": "2021-06- 18T01:38:51.924Z" }	None	Yes	POST

/api/TypeTest/compctest	<pre>{ "categoryId": 0, "numberOfcharacters": 0, "numberOferrors": 0, "wpm": 0, "timetakenms": 0, "date": "2021-07- 02T16:30:45.881Z", "won": true, "winStreak": 0, "authId": "string" }</pre>	None	No	POST
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Details:

These endpoints are used for getting quotes for test as well as posting results for tests

GET /api/TypeTest:

Used to get a random quote, author, and length from <http://api.quotable.io/random>

Returns: Output or 500 on internal server error.

GET /api/TypeTest/{id}:

Used to get a random quote on -1 or language number from Octokit.Language to search in <https://raw.githubusercontent.com/> for a random file in that language to get for coding test.

Gets FullName from the repository as "author," file content as "content," length as length, and the "categoryId" as the language number from Octokit.Language

Returns: Output or 500 on internal server error.

POST /api/TypeTest:

Used to post the results of a type test to the database, adding a category and/or user if necessary and updating user stats.

Returns: 200 or 400 if given a bad input.

POST /api/TypeTest/compctest

Used to post the results of a competition test from competition to the User Tests Back End. Should only be used by Competition Back-End.

Returns: 204 or 400 on bad request.

Competition Back-End

URL: <http://20.69.69.228/competition/>

Competitions

Endpoint	Input	Output	Requires Authorization	HTTP
/api/Competition	None	[{ "name": "string", "start": "2021-06-18T02:21:56.857Z", "end": "2021-06-18T02:21:56.857Z", "category": 0, "snippet": "string", "author": "string", "compId": 0 }]	No	GET
/api/Competition/{id}	URL: int id, Refers to id of competition	[{ "wpm": 0, "rank": 0, "userName": "string", "accuracy": 0, "name": "string", "compName": "string", "userId": 0 }]	No	GET
/api/Competition	{ "name": "string", "start": "2021-06-18T02:39:36.442Z", "end": "2021-06-18T02:39:36.442Z", "category": 0, "snippet": "string",	link to new competition and competition Id as int in body	Yes	POST

	<pre>"author": "string", "compld": 0 }</pre>			
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Details:

These endpoints, deal with creating/viewing/viewing results of/betting on competitions. The Competition Stats are more to deal with directly accessing and posting the relevant user test.

GET /api/Competition:

Used to get a list of all competitions in the database with relevant Dates for start and end, as well as information around the competition.

Returns: Output or 404 if the competitions cannot be found.

GET /api/Competition/{id}:

Used to get the result of a competition as a list of the participants' entries.

Returns: Output or 404 if no such competition with the id can be found.

POST /api/Competition:

Used to post a new competition to the database.

Returns: 201 with route and then new competition Id in body, otherwise 400 if user tries to enter bad data.

Competition Tests

Endpoint	Input	Output	Requires Authorization	HTTP
/api/CompetitionTests/{id}	URL: int id, Refers to id of competition	<pre>{ "id": 0, "testString": "string", "author": "string", "categoryId": 0 }</pre>	No	GET
/api/CompetitionTests/	<pre>{ "categoryId": 0, "numberOfcharacters": 0, "numberOferrors": 0, "wpm": 0, "timetakenms": 0,</pre>	New ranking as int in body	Yes	POST

	<code>"date": "2021-06-18T03:36:48.833Z", "compld": 0 }</code>			
<code>/api/ CompetitionTests/newtest/{id}</code>	URL: int refers to category name in the below enum	<code>{ "content": "string", "author": "string", "length": 0, "categoryId": 0 }</code>		

Details:

These endpoints relate to the test that the static competition is based around, providing it or posting the new result.

GET /api/CompetitionTests/{id}:

Used to get the information needed for a user to take the test in the competition and have the results affect their profile statistics.

Returns: Output or 404 if competition cannot be found.

POST /api/CompetitionTests:

Used to post the user's competition result to the database and updates their statistics accordingly.

Returns: 200 with rank in the body or 400 if the test input is incorrect or the competition is already done. Returns 404 if competition cannot be found.

GET /api/CompetitionTests/newtest/{id}:

Used to get a test for a competition, mirror of the **GET /api/TypeTest/{id}** method in User Tests

Id = categoryId

Returns: Output or 500 on internal server error.

Live Competitions

Endpoint	Input	Output	Requires Authorization	HTTP
<code>/api/LiveCompetition</code>	None	<code>[{ "id": 0, "name": "string"</code>	No	GET

		}]		
/api/LiveCompetition/{id}	URL: int id, Refers to competition Id	[{ "compId": 0, "testString": "string", "testAuthor": "string", "category": 0 }]	No	GET
/api/LiveCompetition/latest/{id}	URL: int id, Refers to competition Id	{ "compId": 0, "testString": "string", "testAuthor": "string", "category": 0 }	No	GET
/api/LiveCompetition/nexttest	{ "compId": 0, "category": 0, "testString": "string", "testAuthor": "string" }	None	No	PUT
/api/LiveCompetition	{ "name": "string" }	link to new competition and competition Id as int in body	Yes	POST

Details:

These endpoints directly relate to the live competitions, providing anything the live competitions need.

GET /api/LiveCompetition:

Used to get a list of live competitions in the database.

Returns: Output or 500 on internal server error.

GET /api/LiveCompetition/{id}:

Used to get a list of tests for a given live competition.

Returns: Output or 500 on internal server error.

GET /api/LiveCompetition/latest/{compld}:

Used to get the last test added to the live competition.

Returns: Output or 404 if no tests can be found.

PUT /api/LiveCompetition/nexttest:

Used to add a new test to a live competition with provided compld.

Returns 200 or 400 on Bad Request.

POST /api/LiveCompetition:

Used to post a new competition to the database.

Returns: Returns: 201 with route and then new competition Id in body, otherwise 400.

UserQueue – In Progress

Endpoint	Input	Output	Requires Authorization	HTTP
/api/LiveCompetition/{Compld}/LCQ/NextUser	URL: Compld	{ "userId" : 0, "userName": "string", "name": "string", "enterTime": "2021-06-18T02:21:56.857Z" }	No	DELETE
/api/LiveCompetition/LCQ/{Compld}	URL: Compld	[{ "userId" : 0, "userName": "string", "name": "string", "enterTime": "2021-06-18T02:21:56.857Z" }]	No	GET
/api/LiveCompetition/LCQ/{Compld}	URL: Compld	None	Yes	PUT
/api/LiveCompetition/LCQ/{Compld}	URL: Compld	None	Yes	DELETE

Details

These endpoints are used to manipulate the user queue for a given room “compld”

DELETE /api/LiveCompetition/LCQ/NextUser/{Compld}:

Used to get the next member in queue. userID is the DB representation of authID

Returns: 200 if successful and 404 if no users are in queue, or if the room does not exist

GET /api/LiveCompetition/LCQ/{Compld}:

Used to get the list of users in queue. This list will be ordered by the oldest to newest

Returns: 200 if successful and 404 if the room does not exist.

PUT /api/LiveCompetition/LCQ/{Compld}:

Used to add a user to the queue. Note that all information is gathered from Auth for the user.

Returns: 200 if successfully created and 404 if the competition cannot be found

DELETE /api/LiveCompetition/LCQ/{Compld}:

Used to remove User when they disconnect. No Auth is required as this should be handled by the Socket.

Returns: 200 if successful and 404 if the user cannot be found

Live Competition Stats

Endpoint	Input	Output	Requires Authorization	HTTP
/api/LiveCompetition/LCS/{id}	URL: Compld	[{ "userId": 0, "userName": "string", "name": "string", "wins": 0, "losses": 0, "wlRatio": 0 }]	No	GET

/api/LiveCompetition/LCS/{id}	URL: Compld Body: <pre>{ "categoryId": 0, "numberOfchar acters": 0, "numberOferror s": 0, "wpm": 0, "timetakenms": 0, "date": "2021- 07- 01T21:14:09.90 0Z", "won": true, "winStreak": 0 }</pre>	None	Yes	Put

Details

These endpoints are used to get live competition statistics and submit tests to live competition statistics.

GET /api/LiveCompetition/LCS/{id}:

Used to get a list of users that have participated in a room ordered by their wins.

PUT /api/LiveCompetition/LCS/{id}

Used to update a user's wins and losses in the live competition statistics table, then sends test to user tests.

Leaderboard Back-End

URL: <http://20.69.69.228/lb/>

Endpoint	Input	Output	Requires Authorization	HTTP
/api/LB	None	[No	GET

		<pre>{ "authId": "string", "userName": "string", "name": "string", "averageWPM": 0, "averageAcc": 0, "catID": 0 }</pre>		
/api/LB	<pre>[{ "authId": "string", "userName": "string", "name": "string", "averageWPM": 0, "averageAcc": 0, "catID": 0 }]</pre>	None	No	PUT
/api/LB/{cID}	Path: int cID, Refers to category number Inputs: String AuthID, Int cID	None	Yes	DELETE
/api/LB/{id}	Path: int id, Refers to category number	<pre>[{ "authId": "string", "userName": "string", "name": "string", "averageWPM": 0, "averageAcc": 0, "catID": 0 }]</pre>	No	GET

Details:

These endpoints are used to get the users ranked by their performance.

GET /api/LB:

Used to get the users sorted by their overall performance as a list.

PUT/api/LB:

Used to add/update a list of leaderboards, given the list of leaderboards, into the leaderboard sorted by their overall performance as a list.

DELETE /api/LB/{cID}:

Used to delete the user's leaderboard, given their authID and category ID, from the leaderboard.

GET /api/LB/{id}:

Used to get the users, given the category ID, by their specific category ID.

Discussion Forum Back-End

URL: <http://20.69.69.228/discussion/Comments>

Endpoint	Input	Output	Requires Authorization	HTTP
/api/Comment	None	[{ "commentID": 0, "postID": 0, "userName": "string", "ImgURL?": "string", "created": "2021-06-28T21:06:57.508Z", "message": "string", "isUser" : bool }]	Yes	GET
/api/Comment	{ "postID": 0, "created": "2021-06-28T21:06:57.508Z", "message": "string" }	None	Yes	POST
/api/Comment	{ "commentID": 0, "postID": 0, "created": "2021-06-28T21:06:57.508Z", "message": "string" }	None	No	PUT
/api/Comment/{id}	Path:	None	Yes	DELETE

	int id, Refers to comment id			
/api/Comment/{id}	Path: int id, Refers to ForumPostid	[{ "UserID" "commentID": 0, "postID": 0, "userName": "string", "ImgURL?": "string", "created": "2021-06-28T21:06:57.508Z", "message": "string", "isUser" : bool }]	No	GET

Details:

GET /api/Comment:

Used to get all the comments.

POST/api/Comment:

Used to add a comment.

PUT/api/ Comment:

Used to update a comment

DELETE /api/Comment/{Commentid}:

Used to delete a comment, given the comment ID.

GET /api/Comment/{ForumPostid}:

Used to get the comment, given the ForumPost ID.

Forums

Endpoint	Input	Output	Requires Authorization	HTTP
/api/Forum	None	[No	GET

		<pre>{ "forumID": 0, "topic": "string", "description": "string" }</pre>		
/api/Forum	<pre>{ "forumID": 0, "topic": "string", "description": "string" }</pre>	None	Yes	POST
/api/Forum	<pre>{ "forumID": 0, "topic": "string", "description": "string" }</pre>	None	Yes	PUT
/api/Forum/{id}	Path: int id, Refers to forum id	None	Yes	DELETE
/api/Forum/{id}	Path: int id, Refers to forum id	<pre>{ "forumID": 0, "topic": "string", "description": "string" }</pre>	No	GET

Details:

These endpoints are used to get the users ranked by their performance.

GET /api/Forum:

Used to get all forums.

POST/api/Forum:

Used to add a forum.

PUT/api/Forum:

Used to update a forum.

DELETE /api/Forum/{Forumid}:

Used to delete a forum, given the forum ID.

GET /api/Forum/{Forumid}:

Used to get forum, given the forum ID.

Forum Posts

Endpoint	Input	Output	Requires Authorization	HTTP
/api/ForumPost	None	[{ "postID": 0, "topic": "string", "userName": "string", "ImgURL?": "string", "DateCreated" : "2021-06- 28T21:06:57.508Z" "description" : "string", "forumID": 0, "isUser" : bool }]	No	GET
/api/ForumPost	{ "topic": "string", "description" : "string", "forumID": 0 }	None	Yes	POST
/api/ForumPost	{ "postID": 0, "topic": "string", "description" : "string", "forumID": 0 }	None	Yes	PUT
/api/ForumPost /{id}	Path: int id, Refers to forum post id	None	Yes	DELETE
/api/ForumPost/{id}	Path: int id, Refers to forum id	[{ "postID": 0, "topic": "string",	No	GET

		<pre> "userName": "string", "ImgURL?": "string", "DateCreated" : "2021-06- 28T21:06:57.508Z", "description" : "string", "forumID": id }]</pre>		
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Details:

These endpoints are used to get the users ranked by their performance.

GET /api/ForumPost:

Used to get all the forum posts.

POST/api/ForumPost:

Used to add a forum post.

PUT/api/ForumPost:

Used to update a forum post.

DELETE /api/ForumPost/{ForumPostid}:

Used to delete a forum post, given the forum post ID.

GET /api/ForumPost/{Forumid}:

Used to get a list of forum posts, given the forum ID.

Appendix: Category Naming System

For the list of currently supported languages see the enum below:

{	Quotes = -1,	ActionScript = 1,
Ada = 2,	AppleScript = 4,	Arduino = 6,
Asp = 8,	Awk = 12,	C = 18,
Cobol = 24,	Cmake = 25,	CoffeeScript = 27,
CPlusPlus = 31,	CSharp = 32,	Css = 33,

CppObjDump = 34,	Cython = 36,	EmacsLisp = 51,
FSharp = 53,	Fortran = 59,	Gsl = 65,
Go = 66,	Haskell = 73,	Java = 81,
JavaScript = 83,	Json = 84,	Kotlin = 87,
Less = 89,	Llvm = 95,	Lua = 98,
Makefile = 100,	Markdown = 102,	Matlab = 103,
Moonscript = 109,	NumPY = 117,	ObjectiveC = 119,
ObjectiveJ = 120,	OpenCL = 125,	Pascal = 130,
Perl = 131,	Php = 132,	PowerShell = 135,
Python = 140,	R = 142,	Racket = 143,
Ruby = 151,	Rust = 152,	Scala = 153,
Sass = 156,	Scss = 158,	Shell = 160,
Squirrel = 164,	SuperCollider = 166,	TeX = 170,
TypeScript = 176,	Verilog = 180,	Vhdl = 181,
VimL = 182,	VisualBasic = 183,	Volt = 184,
Wisp = 185,	Xml = 187,	XQuery = 189,
Yaml = 193	}	