



API Documentation

- 1. <u>Mastery-based Coaching</u>
- 2. <u>Purpose Driven</u>
- 3. School Map
- 4. <u>Tournament Create & Manage</u>
- 5. <u>Tournament Join</u>
- 6. <u>Tournament Ranking and Mentor Assignment</u>
- 7. Events

1. Mastery-based Coaching

Type: GET	Description:
	To retrieve a coach
URL: /jsonapi/coach	
Parameters: -	Payload : -
Response:	coachData
{"coachesData":	Array of coach objects
[{	coachID
"coachID":integer,	Unique id for the coach
"name":String	name
"image":String,	Name of the coach
"description": String,	image
	Default image to show when selecting coach
"audiofile":{	description
"greeting": String,	Description of the coach
"welcomeback": String,	'
"areyouthere":String,	audiofile
"dontgiveup":String,	the specific attribute of the audifile such as "greeting"
"correctanswer": String,	or "welcomeback" acts as a key that stores in the
"tryother": String,	value of the audio_file location for that specific key
"faster": String,	attribute.
"lessattempts": String	
},	
	audiotext
"audiotext":{"greeting": String,	the specific attribute of the audiotext such as
"welcomeback": String,	"greeting" or "welcomeback" acts as a key that stores
"areyouthere":String,	in the string of what is being said to it's audiofile
"dontgiveup":String,	counterpart.
"correctanswer": String,	55 5
"tryother": String,	
"faster": String,	
"lessattempts": String	
},	
D.	

"nictures", ("greating", String	
"pictures": {"greeting": String,	
"welcomeback": String,	Pictures
"areyouthere":String,	the specific attribute of the pictures such as "greeting"
"dontgiveup":String,	or "welcomeback" acts as a key that stores in the
"correctanswer": String,	location of the image to be shown when it plays the
"tryother": String,	audio of its audiofile counterpart.
"faster": String,	
"lessattempts": String	
}	
}	
]}	
Comments:	

Sample Output of GET: /jsonapi/coach

{"coachesData":

[{"coachID":1,"name":"Shannon","image":"img/mbcoach/Shannon/Shannon.jpg","description":"Encourager that wants you to be ready to code with your friends",

"audiofile":{"greeting":"audio/Shannon/greeting.mp3","welcomeback":"audio/Shannon/welcomeback.mp3","areyouthere":"audio/Shannon/areyouthere.
mp3","dontgiveup":"audio/Shannon/dontgiveup.mp3","correctanswer":"audio/Shannon/correctanswer.mp3","tryother":"audio/Shannon/tryother.mp3","f
aster":"audio/Shannon/faster.mp3","lessattempts":"audio/Shannon/lessattempts.mp3"},

"audiotext":{"greeting":"Hi I am Shannon, I am here to help you practice and resolve some of the problems you have seen before.By resolving this problems, you'll be a little better prepared the next time you get together with your friends to do some coding.","welcomeback":"Welcome back! You were on a roll the last time. If you keep coding like this every day, your friends are going to come to you for help! Now, let's start on this question!","areyouthere":"Hey – are you there? I hope you are not giving up! Let's finish these problems together! ","dontgiveup":"Hmm...there seems to be an error. Check the compiler. It will help you solve it quicker.","correctanswer":"Alright! That was a good one! Let's move onto the next one!","tryother":"You are on a roll! Here, try another question!","faster":"This question shouldn't take you so long – I believe in you!","lessattempts":"Now here's a problem that I think you can do in fewer attempts. "},

"pictures":{"greeting":"img/mbcoach/Shannon/Shannon.jpg","welcomeback":"img/mbcoach/Shannon/Shannon.jpg","areyouthere":"img/mbcoach/Shannon.jpg","dontgiveup":"img/mbcoach/Shannon/Shannon.jpg","correctanswer":"img/mbcoach/Shannon.jpg","tryother":"img/mbcoach/Shannon.jpg","faster":"img/mbcoach/Shannon.jpg","lessattempts":"img/mbcoach/Shannon.jpg"
}

Type: GET		Description:	
		To retrieve the coach status	
URL: /jsonapi/current_coaching_status			
Parameters:	Payload :		
Response:		currentUserMasteryProgress	
var currentUserMasteryProgress = {		shows the current status of users playing Mastery	
"showNewProblems":boolean,		showNewProblems	
"nextProblemID": integer,		determines if a new problems will occur in game.	
"coach":String,		nextProblemID	
"goal": String		problem Id of the next problem to solve.	
		Coach	
"next_ten":		The last coach chosen and will be defaulted to	
[{"percentile_time":float, "percentile_attempts": float, "problem	nId": integer }],	goal	
[{ percentile_time :modi, percentile_uttermpts : modi, problemia : mteger jj,		determines if a user requires "faster" or "less	
"fromProblemSetID": integer,		attempts"	
"coachID": integer,		next_time	
		An Array that an object with the players' 10 least	
"past_result":		performing problems. It gives the percentile of time	
'problemID": integer, "name":" String ", "goal":" String ", "percent_improvement": integer },		taken, total attempts percentile for a specific problem	
		ID.	
"pathName":" String ",		fromProblemSetID	
"pathID":" integer "		The problemSet that the nextProblemID is from	
} ;		coachID	
		ID of the coach	
Comments:		past_result	
		yet to be implemented.	
		pathName	
		name of the language the user currently selects	
		pathID	
		ID of the pathName	

Sample Output of GET: / jsonapi/current coaching status

```
currentUserMasteryProgress = {
"showNewProblems":true,
"nextProblemID": 52741,
"coach": "Shannon",
"goal": "faster", // or lessattempts
"next_ten":
[ {"percentile_time":0.1,"percentile_attempts":0.2,"problemId":52741},
{"percentile_time":0.2,"percentile_attempts":0.1,"problemId":52472},
{"percentile_time":0.2,"percentile_attempts":0.1,"problemId":57555},
{"percentile_time":0.11,"percentile_attempts":0.0023,"problemId":52747},
{"percentile_time":0.001,"percentile_attempts":0.0023,"problemId":52748},
{"percentile_time":0.001,"percentile_attempts":0.0023,"problemId":52749},
{"percentile time":0.001,"percentile attempts":0.0023,"problemId":52747},
{"percentile_time":0.001,"percentile_attempts":0.0023,"problemId":52748},
{"percentile time":0.001,"percentile attempts":0.0023,"problemId":52749},
{"percentile_time":0.001,"percentile_attempts":0.0023,"problemId":52740}],
"fromProblemSetID":10041,
"coachID":4,
"past_result":{"problemID":10033, "name":"Expected Results", "goal":"faster", "percent_improvement":22},
"pathName": "python",
"pathID":"10030"
};
```

2. Purpose Driven

Type: GET	Description:	
	To retrieve the spe	ecific video based on the video ID
URL: /jsonapi/purposevideos	·	
Parameters:	Payload :	
Response:	Videos	
{		at include details such as ID, title,
េ"Videos":[image and such	it include details such as 10, title,
{	ID	
"id" : integer,	Unique id for the v	rideo
"no" : integer,	no	1400
"title" : String,	Number of the vide	eo in a gallery
"image" : String,	title	3 ,
"thumbnail": String,	The name of the vi	deos (i.e. "What Most School Don't
"vlink": String,	Teach")	·
"description" : String ,	image	
"selected": integer,	Previously this ima	ge file (path) was used as a
"unlocked": Boolean	placeholder	
}	thumbnail	
]	File path of the image	age used as a thumbnail for the
	video	
}	vlink	
	The YouTube link o	of the video
Comments:	description	
	·	vhat the video is about
	question	
	The prompted que	stion to the user
	feedback	
	Record response u	ser enters
	Unlocked	
	Boolean to check it	f user had already unlocked this vid

Sample Output of GET:/jsonapi/purposevideos

{"Videos":[

{"id":01,"no":0,"title":"What Most School Don't

Teach","image":"img/purposedrivenPlaceholder/PurposeDriven0.jpg","thumbnail":"img/purposedrivenPlaceholder/thumb/0.jpg","vlink":"http://www.yout ube.com/watch?v=nKlu9yen5nc","description":"Learn about a new 'superpower' that isn't being taught in in 90% of US schools. Starring Bill Gates, Mark Zuckerberg, will.i.am, Chris Bosh, Jack Dorsey, Tony Hsieh, Drew Houston, Gabe Newell, Ruchi Sanghvi, Elena Silenok, Vanessa Hurst, and Hadi Partovi. D","question":"How does this video make you feel?", "feedback":1,"unlocked":true},

{"id":02,"no":1,"title":"Art of Creative

Coding", "image": "img/purposedrivenPlaceholder/PurposeDriven1.jpg", "thumbnail": "img/purposedrivenPlaceholder/thumb/1.jpg", "vlink": "http://www.you tube.com/watch?v=eBV14-3LT-g", "description": "Programming plays a huge role in the world that surrounds us, and though its uses are often purely functional, there is a growing community of artists who use the language of code as their medium.", "question": "How does this video make you feel?", "feedback": 3, "unlocked": true}

{"id":900,"no":9,"title":"NEW NEWS: Computer coding for

kids","image":"img/purposedrivenPlaceholder/PurposeDriven4.jpg","thumbnail":"img/purposedrivenPlaceholder/thumb/4.jpg","vlink":"http://www.youtube.com/watch?v=WGZioLhbZ6g","description":"Teaching kids how to write computer programs, by Marshall Brain marshallbrain.com/kids-programming.htm - Traduzir esta página Let's say that you have children, and you would like to help them learn computer programming at a youngish age.","question":"How does this video make you feel?", "feedback":0,"unlocked":false}

]}

Type: POST	Description:
	To unlocked the next video and saving the feedback
	value of the last watched video
URL: /jsonapi/record_purpose_video_unlock/	
Payload :	Parameters:
{	1.feedback refers to the value of the input selected by the user upon
"feedback": integer,	watching the video.
"purposevideo": integer	2.purposevideo refers to the position of video in the arraylist that was
}	retrieves in /jsonapi/purposevideos
Response:	Result
{ "result": String	will just give status base on the Post. All successful
}	POST of this API leads to this response.
Comments:	

```
Sample Payload of POST : /jsonapi/record_purpose_video_unlock/

$scope.userCurrentVideo = $resource("/jsonapi/record_purpose_video_unlock/");
var data = {"purposevideo": 3,"feedback":0};
var item = new $scope.userCurrentVideo(data);
item.$save(function(response) {
   $scope.response = response;
})

Sample Output of POST : /jsonapi/record_purpose_video_unlock/

{"result":"video 3 unlocked and updated"})
```

3. School Map & Registration

Type: GET	Description:
	Retrieves all SG schools in the database
URL: /jsonapi/schools/SG	
Parameters:-	Payload :-
Response:	Grouped by School Type
"University": [Grouped by School Type - University
s of the street	- Tertiary
"name": "Singapore Management University",	- Secondary
"schooltype": "University",	name
"created": "2013-10-18T06:52:15.473820",	School name
"longitude": 103.849884,	schoolType
"subtype": "Local",	School type based on level
"latitude": 1.2966608,	created
"id": 4838709618802688	Time stamp school was added to database
},	longitude
<u>"</u>	Longitude of the school
"name": "Singapore University of Technology and Design",	subtype
"schooltype": "University",	Subtype of school. Used primarily to differentiate
"created": "2013-10-18T06:52:15.563320",	between junior colleges and polytechnics at the
"longitude": 103.78118,	tertiary level
"subtype": "Local",	latitude
"latitude": 1.300555,	Latitude of School
"id": 5033984601882624	id
},	ID of the school
{	
"name": "National University of Singapore",	
"schooltype": "University",	
"created": "2013-10-18T06:52:15.369270",	
"longitude": 103.770355,	
"subtype": "Local",	
"latitude": 1.2933539,	
"id": 5445803246092288	

```
"name": "SIM University",
      "schooltype": "University",
      "created": "2013-10-18T06:52:15.772720",
      "longitude": 103.77585,
      "subtype": "Local",
      "latitude": 1.328807,
      "id": 5560500347731968
      "name": "Singapore Institute of Technology",
      "schooltype": "University",
      "created": "2013-10-18T06:52:15.675140",
      "longitude": 103.849815,
      "subtype": "Local",
      "latitude": 1.290036,
      "id": 6324287266881536
      "name": "Nanyang Technical Univeristy",
      "schooltype": "University",
      "created": "2013-10-18T06:52:15.197620",
      "longitude": 103.68101,
      "subtype": "Local",
      "latitude": 1.344557,
      "id": 6555038679826432
Comments:
```

Sample Output of GET: /jsonapi/schools/SG

{"University":[{"name":"Singapore Management University","schooltype":"University","created":"2013-10-

18T06:52:15.473820","longitude":103.849884,"subtype":"Local","latitude":1.2966608,"id":4838709618802688},{"name":"Singapore University of Technology and Design","schooltype":"University","created":"2013-10-

18T06:52:15.563320", "longitude":103.78118, "subtype": "Local", "latitude":1.300555, "id":5033984601882624}, {"name": "National University of Singapore", "schooltype": "University", "created": "2013-10-

18T06:52:15.369270", "longitude":103.770355, "subtype": "Local", "latitude":1.2933539, "id":5445803246092288}, {"name": "SIM University", "schooltype": "University", "created": "2013-10-

18T06:52:15.772720","longitude":103.77585,"subtype":"Local","latitude":1.328807,"id":5560500347731968},{"name":"Singapore Institute of Technology","schooltype":"University","created":"2013-10-

18T06:52:15.675140","longitude":103.849815,"subtype":"Local","latitude":1.290036,"id":6324287266881536},{"name":"Nanyang Technical University","schooltype":"University","created":"2013-10-

18T06:52:15.197620", "longitude":103.68101, "subtype": "Local", "latitude":1.344557, "id":6555038679826432}]}

Type: GET URL: /jsonapi/school_registration		Description: Retrieves all users who have registered their SG schools to their account
Parameters:	Payload :	
Response: example of the response body – include the name and type [Describe each of the parameter in the response body and what it's for. Here's a sample: school id for school schooltype Type of school based on level subtype Sub type of school to differentiate within levels created Time stamp for when entry was created player Player ID year Year first started in that school id ID for specific entry

Sample Output of GET: /jsonapi/school_registration

```
"school": 5201806154006528,
"schooltype": "Secondary",
"subtype": "",
"created": "2013-10-18T09:51:42.456680",
"player": 50001,
"year": 2010,
"id": 4527977324871680
"school": 5201806154006528,
"schooltype": "Secondary",
"subtype": "",
"created": "2013-10-18T09:51:42.456680",
"player": 50000,
"year": 2008,
"id": 4527977324871680
"school": 5201806154006528,
"schooltype": "Secondary",
"subtype": "",
"created": "2013-10-18T09:51:42.456680",
"player": 57754,
"year": 2008,
"id": 4527977324871680
```

4. Tournament (Create & Manage)

Type: POST	Description:
	To create new tournament or edit existing
	tournament
URL:	·
/jsonapi/create_or_update_tournament	
&	
/jsonapi/create_or_update_tournament/ + tournamentID	
Payload :	Parameters :
Create Tournament	 shortTitle – Title of the tournament.
{	2. description – short description of the tournament.
"shortTitle": String,	3. password – password for players to register for the tournament.
"description": String,	4. status – status of the tournament. Initialized as 'Closed'.
"password": String,	5. details – additional details of the tournament
"status": "Closed",	6. isGroup – Boolean value to indicate whether tournament is a group
"type": "Genshyft",	tournament.
"details": String,	7. assignMentorInTeam - Boolean value to indicate whether mentor
"isGroup": Boolean,	assignment is done within the team for a group tournament.
"assignMentorInTeam": Boolean,	8. maxGroups – maximum number of groups for a group tournament.
"maxGroups": Integer,	Default value is 0 if it is not a group tournament.
"maxPlayersPerGroup": Integer	9. maxPlayersPerGroup - maximum number of players per group for a
}	group tournament. Default value is 0 if it is not a group tournament.
	10. tournamentID – tournament ID of the tournament to be edited.
Edit Tournament	
{	
"tournamentID": Integer,	
"shortTitle": String,	
"description": String,	
"password": String,	
"status": "Closed",	
"type": "Genshyft",	
"details": String,	
"isGroup": Boolean,	
"assignMentorInTeam": Boolean,	
"maxGroups": Integer,	
"maxPlayersPerGroup": Integer	

Response: Result **Create Tournament** will just give status base on the Post. All successful POST of this API leads to this response. Error "printing response here:" + JSON.stringify(response), "printing error in response here:" + response.error Success "Successfully Save Group tournament into DB", "tournamentID" **Edit tournament** Error "Printing Error Here: " + response.error Success "Save edited tournament details into DB" **Comments:**

Sample Payload of POST:/jsonapi/create_or_update_tournament

```
var data = {"shortTitle": "JavaScript Group Tournament",
          "description": "Group Tournament Example",
          "password": "Password",
          "status": "Closed",
          "type": "Genshyft",
          "details": "Additional details for tournament",
          "isGroup": true,
          "assignMentorInTeam": true,
          "maxGroups": 10,
          "maxPlayersPerGroup": 3}
   $scope.NewGrpTournament = $resource('/jsonapi/create_or_update_tournament');
   var new_grpTournament = new $scope.NewGrpTournament(data);
   new_grpTournament.$save(function(response){
    if(response.error) {
     console.log("printing response here:" + JSON.stringify(response));
     console.log("printing error in response here:" + response.error);
    console.log("Successfully Save Group tournament into DB")
    $scope.createdTournament = response;
    console.log($scope.createdTournament.id);
   })
Sample Output of POST:/jsonapi/create or update tournament
{"Successfully Save Group tournament into DB", 123456}
```

Sample Payload of POST:/jsonapi/create_or_update_tournament/+tournamentID

```
var data = {"tournamentID": 123456,
          "shortTitle": "JavaScript Group Tournament",
          "description": "Group Tournament Example",
          "password": "Password",
          "status": "Closed",
          "type": "Genshyft",
          "details": "Additional details for tournament",
          "isGroup": true,
          "assignMentorInTeam": true,
          "maxGroups": 10,
          "maxPlayersPerGroup": 3}
   $scope.NewTournament = $resource('/jsonapi/create_or_update_tournament/'+ 123456);
   var new_tournament = new $scope.NewTournament(updatedTournament);
   new_tournament.$save(function(response){
    if(response.error) {
     console.log("Printing Error Here: " + response.error)
    console.log("Save edited tournament details into DB")
   });
Sample Output of POST: /jsonapi/ create or update tournament + tournamentID
```

{" Save edited tournament details into DB"}

Type: POST **Description:** To create new rounds or edit existing rounds URL: /jsonapi/add_or_update_round /jsonapi/ add or update round / + roundID Payload: Parameters: 1. timelimit – duration of each round in seconds Create Round 2. description – title of the round 'timelimit': Integer * 60, 3. problemIDs – array of problem IDs for the round 'description': String, 4. tournament ID of the tournament the round 'problemIDs': Array of Integers, belongs to 'tournamentID': Integer 5. roundID - round ID of the round to be edited **Edit Round** "roundID": Integer, "timelimit": Integer * 60, "problemIDs": Array of Integers, "description": String Response: Result **Create Round** will just give status base on the Post. All successful POST of this API leads to this response. Error String Success "Successfully Save round into DB", JSON.stringify(\$scope.round) **Edit Round**

Error	
{	
"Printing Error Here: " + response.error	
}	
Success	
{	
"Save edited round details into DB"	
}	
Comments:	

```
Sample Payload of POST: /jsonapi/add or update round
var data = {'timelimit': 3600,
      'description': "Fun Round",
      'problemIDs': [1234,2345,3456,5345],
      'tournamentID': 123456
   $scope.NewRound = $resource('/jsonapi/add_or_update_round');
   var new_round = new $scope.NewRound(data);
   new_round.$save(function(response){
    if(response.error) {
     console.log(response.error)
    else{
     console.log("Successfully Save round into DB");
     $scope.round = response;
     console.log(JSON.stringify($scope.round))
})
Sample Output of POST: /jsonapi/add_or_update_round
{"Successfully Save round into DB",
'timelimit': 3600, 'description': "Fun Round", 'problemIDs': [1234,2345,3456,5345], 'tournamentID': 123456,'roundID':1111
```

```
Sample Payload of POST: /jsonapi/add_or_update_round/ + roundID

$scope.NewRound = $resource('/jsonapi/add_or_update_round/'+ 1111);
  var new_round = new $scope.NewRound(updatedRound);
  new_round.$save(function(response){
    if(response.error) {
      console.log("Printing Error Here: " + response.error)
    }
    //$scope.round = response;
    console.log("Save edited round details into DB")
    });

Sample Output of POST: /jsonapi/add_or_update_round + roundID

{" Save edited round details into DB "}
```

Type: POST	Description:
	To stop any ongoing heat for current round
URL:	
/jsonapi/stop_heat_updated	
Payload :	Parameters :
{	1. tournamentID – tournament ID of the tournament the round
"tournamentID": integer	belongs to
"roundID": integer	2. roundID – round ID of the round for the heat to be stopped
}	
Response:	Result
Success	will just give status base on the Post. All successful
{	POST of this API leads to this response.
"Stop current round heat"	
}	
Error	
{	
"An error occurred."	
}	
Comments:	

Sample Payload of POST: /jsonapi/stop_heat_updated

```
$http.post("/jsonapi/stop_heat_updated", {
    tournamentID: 123456,
    roundID: 1111
  }).success(function (data, status, headers, config) {
    $scope.stopHeat_response = data;
    console.log(data);
    if (data.failed){
     alert(data.failed);
    else{
     console.log("Stop current Round Heat")
     console.log(data);
     alert("Heat is stopped");
  }).error(function (data, status, headers, config) {
    console.log("Error");
    alert("An error occurred.")
    console.log(data);
  });
Sample Output of POST: /jsonapi/stop heat updated
```

{"Stop current Round Heat"}

5. Tournament - Join

Type: GET	Description:	
	Gets tournament details	
URL: /jsonapi/tournament/ <tournamentid> or /jsonapi/fetch_tour</tournamentid>	ament/ <tournamentid></tournamentid>	
Parameters: -	Payload : -	
Response:	status	
{	Tournament status	
"status": "Open for registration",	currentPlayerID	
"currentPlayerID": 57754,	the current player who is logged in ID number	
"description": "Test Group Tournament",	description	
"directorID": 57754,	Tournament description	
"isGroup": true,	directorID	
"tournamentID": 5060388987076609,	Tournament Director ID number	
"maxPlayersPerGroup":5,	maxPlayersPerGroup	
"maxGroups":20,	The maximum number of player to be in a gro	up
"assignMentorInTeam": true,	maxGroups	
"rounds": [The maximum number of group in the tournar	nent
{	assignMentorInTeam	
"roundID": 4912161075757056,	Mentor to be in assign within the group	
"currentHeatDetails": {	rounds	
"gameIDsForHeat": {	Array of rounds of the tournament have	
"57754": 6096747415732224,	roundID	
"2739102": 6412161224015872	The maximum number of player to be in a gro	up
},	currentHeatDetails	
"problemsInHeat": [The details of the current ongoing heat in the	round
10033,	gameIDsForHeat	
17155	game ID number for the heat for the players	
],	problemsInHeat	
"heatID": 4691468476219391,	problems ID number that is in the current hear	t
"description": "Heat 2",	heatID	
"startTime": "2013-10-04 14:02:05.835670",	The Heat ID number	
"currentTime": "2013-10-04 14:02:00.246270",	description	
"solved Problem ID Lists By Player ID": {	the heat description	
"57754": [startTime	

```
"/problem is solved for game/6096747415732224/10033",
      "/problem is solved for game/6096747415732224/17155"
    "2739102": [
      "/problem is solved for game/6412161224015872/10033",
      "/problem is solved for game/6412161224015872/17155"
"problemIDs": [
  10033,
  17155
"heats": [
    "gameIDsForHeat": {
      "57754": 5817368383062016
    "problemsInHeat": [
      10033.
      17155
    "heatID": 4691468476219392,
    "description": "Heat 1",
    "startTime": "2013-09-29 08:24:46.840830",
    "currentTime": "2013-10-04 13:57:28.164880",
    "solvedProblemIDListsByPlayerID": {
      "57754": [
        "/problem_is_solved_for_game/5817368383062016/10033",
        "/problem is solved for game/5817368383062016/17155"
    "stopTime": "2013-09-29 09:24:46.840830",
    "heatNumber": 1
"description": "Round 1",
"currentHeatID": 4691468476219392,
```

the time of which the heat started

currentTime

The time in which the server return the API

solvedProblemIDListsByPlayerID

The problems which have been solved by each player in the heat

problemIDs

The problem ID number in the heat

heats

Array of previous heats details that have been conducted(object have similar properties with currentHeatDetails except with stopTime)

stopTime

The time of which the heat stop

description

Round description

currentHeatID

The ID number of the current active Heat

currentHeat

The number in which the current heat is in

problemDetails

The exact problem description

registeredPlayerIDs

Array of player that have been registered into the tournament

playerID

The registered player ID numbers

nickname

The name of the registered player

group

The group number in which the registered player is in

numRounds

The number of rounds that the tournament has

shortTitle

The title of the tournament

tournamentType

```
"currentHeat": 2,
    "problemDetails": {
        "10033": {
            "name": "Expected Results",
            "description": "When you run your code, Si
```

"description": "When you run your code, SingPath has certain tests that it checks to see if you did what you were supposed to do. If incorrect you'll see a table with the results of the tests. \r\n\r\nNotice that the starter code has the wrong value. Go ahead and run the code now so you can see the results (you can finish reading this after you run it).\r\n\r\nThe results tell you that SingPath looked at the variable named 'oops' expecting to find 713, but found 317 instead. Fix the error now and run it to advance to the next problem."

```
},
"17155": {
"name": "Variables",
```

"description": "Variables are an important part of programming; they allow the you to store a value and reuse it later. You are allowed to use just about anything you like as your variable name.\r\n\r\nFor this problem, create a variable named 'age' with the value 7."

Default type to Genshyft to recognise as new tournaments in Singpath

winnerText

The winner text to be shown. Currently not used.



```
Sample Output of GET: /jsonapi/tournament/<tournamentID> or /jsonapi/fetch tournament/<tournamentID>
  "status": "Open for registration",
  "currentPlayerID": 57754,
  "description": "Test Group Tournament",
  "directorID": 57754,
  "isGroup": true,
  "tournamentID": 5060388987076609,
       "maxPlayersPerGroup":5,
       "maxGroups":20,
  "assignMentorInTeam": true,
  "rounds": [
      "roundID": 4912161075757056,
      "currentHeatDetails": {},
      "problemIDs": [
        10033,
        17155
      "heats": [
          "gameIDsForHeat": {
            "57754": 5817368383062016
          "problemsInHeat": [
            10033,
```

```
17155
"heatID": 4691468476219392,
"description": "Heat 1",
"startTime": "2013-09-29 08:24:46.840830",
"currentTime": "2013-10-04 13:57:28.164880",
"solvedProblemIDListsByPlayerID": {
  "57754": [
    "/problem_is_solved_for_game/5817368383062016/10033",
    "/problem_is_solved_for_game/5817368383062016/17155"
"stopTime": "2013-09-29 09:24:46.840830",
"heatNumber": 1
"gameIDsForHeat": {
  "57754": 6096747415732224,
  "2739102": 6412161224015872
"problemsInHeat": [
  10033,
  17155
"heatID": 6144086545268736,
"description": "Heat 2",
"startTime": "2013-10-04 14:02:05.835670",
"currentTime": "2013-10-04 13:57:28.306810",
"solvedProblemIDListsByPlayerID": {
  "57754": [
    "/problem_is_solved_for_game/6096747415732224/10033",
    "/problem is solved for game/6096747415732224/17155"
```

```
"2739102": [
               "/problem_is_solved_for_game/6412161224015872/10033",
               "/problem is solved for game/6412161224015872/17155"
           "stopTime": "2013-10-04 15:02:05.835670",
           "heatNumber": 2
      "description": "Round 1",
      "currentHeatID": 4691468476219392,
      "currentHeat": 2,
      "problemDetails": {
         "10033": {
           "name": "Expected Results",
           "description": "When you run your code, SingPath has certain tests that it checks to see if you did what you were supposed to do. If incorrect
you'll see a table with the results of the tests. \r\n\r\nNotice that the starter code has the wrong value. Go ahead and run the code now so you can see the
results (you can finish reading this after you run it).\r\n\r\nThe results tell you that SingPath looked at the variable named 'oops' expecting to find 713, but
found 317 instead. Fix the error now and run it to advance to the next problem."
         "17155": {
           "name": "Variables",
           "description": "Variables are an important part of programming; they allow the you to store a value and reuse it later. You are allowed to use
just about anything you like as your variable name.\r\n\r\nFor this problem, create a variable named 'age' with the value 7."
      "heatIDs": [
         4691468476219392,
         6144086545268736
```

```
"roundID": 4912161075757056,
"currentHeatDetails": {
  "gameIDsForHeat": {
    "57754": 6096747415732224,
    "2739102": 6412161224015872
  "problemsInHeat": [
    10033,
   17155
  "heatID": 4691468476219391,
  "description": "Heat 2",
 //"startTime": "2013-10-04 14:02:05.835670",
  "startTime": "2013-10-04 00:00:00",
  "currentTime": "2013-10-04 14:02:00.246270",
  "solvedProblemIDListsByPlayerID": {
    "57754": [
      "/problem_is_solved_for_game/6096747415732224/10033",
      "/problem_is_solved_for_game/6096747415732224/17155"
    "2739102": [
      "/problem_is_solved_for_game/6412161224015872/10033",
      "/problem_is_solved_for_game/6412161224015872/17155"
 //"stopTime": "2013-10-04 15:02:05.835670",
 "stopTime": "2013-10-04 00:00:00",
  "heatNumber": 3
"problemIDs": [
 10033,
```

```
17155
"heats": [
    "gameIDsForHeat": {
      "57754": 5817368383062016
    "problemsInHeat": [
      10033,
     17155
    "heatID": 4691468476219391,
    "description": "Heat 1",
   "startTime": "2013-09-29 08:24:46.840830",
    "currentTime": "2013-10-04 13:57:28.164880",
    "solvedProblemIDListsByPlayerID": {
      "57754": [
        "/problem_is_solved_for_game/5817368383062016/10033",
        "/problem_is_solved_for_game/5817368383062016/17155"
    "stopTime": "2013-09-29 09:24:46.840830",
    "heatNumber": 1
    "gameIDsForHeat": {
      "57754": 6096747415732224,
      "2739102": 6412161224015872
    "problemsInHeat": [
      10033,
     17155
```

```
"heatID": 6144086545268735,
           "description": "Heat 2",
           "startTime": "2013-10-04 14:02:05.835670",
          "currentTime": "2013-10-04 13:57:28.306810",
           "solvedProblemIDListsByPlayerID": {
             "57754": [
               "/problem is solved for game/6096747415732224/10033",
               "/problem is solved for game/6096747415732224/17155"
             "2739102": [
               "/problem is solved for game/6412161224015872/10033",
               "/problem_is_solved_for_game/6412161224015872/17155"
           "stopTime": "2013-10-04 15:02:05.835670",
           "heatNumber": 2
      "description": "Round 2",
      "currentHeatID": 614408654526873,
      "currentHeat": 2,
      "problemDetails": {
        "10033": {
           "name": "Expected Results",
           "description": "When you run your code, SingPath has certain tests that it checks to see if you did what you were supposed to do. If incorrect
you'll see a table with the results of the tests. \r\n\r\nNotice that the starter code has the wrong value. Go ahead and run the code now so you can see the
results (you can finish reading this after you run it).\r\n\r\nThe results tell you that SingPath looked at the variable named 'oops' expecting to find 713, but
found 317 instead. Fix the error now and run it to advance to the next problem."
        "17155": {
          "name": "Variables",
```

```
"description": "Variables are an important part of programming; they allow the you to store a value and reuse it later. You are allowed to use
just about anything you like as your variable name.\r\n\r\nFor this problem, create a variable named 'age' with the value 7."
      },
      "heatIDs": [
        4691468476219392,
        6144086545268736
    }],
          "registeredPlayerIDs":[
                       "playerID":57754,
                       "nickname":"Chris",
                       "group":1
               },
                       "playerID":2739102,
                       "nickname":"James",
                       "group":0
               },
                       "playerID":9379339,
                       "nickname":"Player 3",
                       "group":1
               },{
                       "playerID":57753,
                       "nickname":"Player 4",
                       "group": 1
               },
```

```
"playerID":2739101,
       "nickname":"Player 5",
       "group":1
},
       "playerID":9379338,
       "nickname":"Player 6",
       "group":2
},
       "playerID":57752,
       "nickname":"Player 7",
       "group": 2
},
       "playerID":2739100,
       "nickname":"Player 8",
       "group":3
},
       "playerID":9379337,
       "nickname":"Player 9",
       "group":3
},
       "playerID":57751,
       "nickname":"Player 10",
       "group":4
},
```

```
"playerID":2739099,
             "nickname":"Player 11",
             "group":4
     },
             "playerID":9379336,
             "nickname":"Player 12",
             "group":5
     },
             "playerID":57750,
             "nickname":"Player 13",
             "group": 5
     },
             "playerID":2739098,
             "nickname": "Player 14",
             "group":5
     },
             "playerId":9379335,
             "nickname":"Player 15",
             "group":5
     }],
"numRounds": 1,
"shortTitle": "Test Group Tournament",
"tournamentType": "Genshyft",
"winnerText": ""
```

Type: POST	Description:
	Join tournament group
URL: /jsonapi/join_group/join	
<pre>Payload : { 'playerID':integer, 'tournamentID':integer, 'group':integer }</pre>	Description: 1. playerID is the current player ID number 2. tournamentID is the current tournament ID number 3. group is the group number the player is joining
Response: { "message": String }	Result will just give status base on the Post. All successful POST of this API leads to this response. message Error message will be shown is error occurs else success message
Comments: In an individual tournament group will be set as 0. To remove user from tourn group to -1. Else it will be 0 for players without groups or any positive value of player click to join.	

Sample Payload of POST:/jsonapi/join_group/join

```
var data = {
    'playerID':playerId,
    'tournamentID':tournamentId,
    'group':groupNo
    };
    $scope.joining_grp = $resource('/jsonapi/join_group/join/');
    var joingrp = new $scope.joining_grp(data);

Sample Output of POST: /jsonapi/join_group/join

{"message":"success "})
```

6. Tournament Ranking and Mentor Assignment

Type: GET	Description:	
	Use to fetch the ranking of the heat. It is also use to	
	determine the mentor assignment	
URL: /jsonapi/get_heat_ranking?heatID= <heatid> or /jsonapi/get_heat_ranking?heatID=<heatid>&nocache=true</heatid></heatid>		
Parameters: heatID, nocache	Payload: No payload. Is taken from the URL.	
Response:	Ranking	
{	Array of player object in ranking order	
"ranking": [status	
{	Status of the game that the player is playing	
"status": String,	mentee	
"mentee": String,	The player mentee name who he/she will be	
"playerid": integer,	mentoring	
"solved_problems": integer,	playerid	
"flagUrl": String,	Player ID of the player in that object	
"finished": String	solved_problem	
"gravatar": String	Number of problems solved	
"mentor": String,	flagUrl	
"mentorID": integer,	Image file of the country flag of the person is in	
"professional": String,	gravatar	
"total_problems": integer,	The player profile picture Gravatar URL link	
"nickname": String,	mentor	
"menteeID": integer,	The player mentor name in the game	
"mentorHasArrived": boolean,	mentorID	
"rankingInGrp": integer,	The player mentor's ID	
"group": integer	professional	
}],	the player profession status	
"heatStopTime": String,	total_problems	
"heatDescription": String,	The total number of problems in the heat	
"tournamentID": integer,	nickname	
"tournamentDescription":String,	The player name	
"roundID": integer,	menteelD	
"heatID": integer,	The player mentee's ID	
"heatStartTime": String,	mentorHasArrived	

"roundDescription": String,
"currentTime": String,
"tournamentType": String,
"type": String,
"isGroup": boolean,
"tournamentStatus":String
}

Comments:

API is used in both ranking and mentor assignment. (TournamentGameController.js and tournament-controller.js)

/jsonapi/get_heat_ranking?heatID=<heatID>: Returns API with a 5 sec cache in the server

/jsonapi/get_heat_ranking?heatID=<heatID>&nocache=true : Returns API with the latest in the Singpath DB.

A Boolean expression to check whether have mentor arrived

rankingInGrp

In a group tournament it will reflect the player ranking in his own group. Else it will be shown as 0.

group

In a group tournament it will reflect the group number the player is in. Else it will be shown as 0.

heatStopTime

The stop time of the heat

heatDescription

The heat title description

tournamentID

The tournament ID number in which the heat is in

tournamentDescription

The tournament description

roundID

The round ID number which the heat is in

heatID

The heat ID number

heatStartTime

The start time of the heat

roundDescription

The round description

currentTime

The current time the server is retrieving the API

tournamentType

To check the tournament creation is which version.

Current default type will always be "Genshyft"

type

The type of API which is returning

isGroup

A Boolean expression to identify whether is it a group or individual tournament

tournamentStatus

The current status of the tournament

```
Sample Output of GET: /jsonapi/get_heat_ranking?heatID=4691468476219392 or
/jsonapi/get heat ranking?heatID=4691468476219392&nocache=true
                 "ranking": [
                     "status": "GAME CLOSED",
                     "mentee": "Fu Mei",
                     "playerid": 57754,
                     "solved_problems": 10,
                     "flagUrl": "/static/flags/sg_on.png",
                     "finished": "0:13:27.311930",
                     "gravatar": "http://www.gravatar.com/avatar/3f0dd6b43fe16552168c919acfbf140d/?default=&s=30",
                     "mentor": "Glen",
                     "mentorID": 1111,
                     "professional": null,
                     "total_problems": 10,
                     "nickname": "Chris",
                     "menteeID": 6474597901795328,
                     "mentorHasArrived": false,
                     "rankingInGrp":1,
                     "group": 1
                     "status": "GAME CLOSED",
```

```
"mentee": "Mrchamp",
"playerid": 6147204892852224,
"solved_problems": 10,
"flagUrl": "/static/flags/sg_on.png",
"finished": "0:15:26.809400",
"gravatar": "http://www.gravatar.com/avatar/949ba044f4d170b60c31461607e8cb99/?default=&s=30",
"mentor": "",
"mentorID": null,
"professional": null,
"total_problems": 10,
"nickname": "Ronald",
"menteeID": 6715360346636288,
"mentorHasArrived": false,
"rankingInGrp":2,
"group": 1
"status": "GAME CLOSED",
"mentee": "Cheuk",
"playerid": 21354567,
"solved problems": 10,
"flagUrl": "/static/flags/jp_on.png",
"finished": "0:19:10.168820",
"gravatar": "http://www.gravatar.com/avatar/2e141f02eb0fc1b80d90c3546e4aa3e1/?default=&s=30",
"mentor": "",
"mentorID": null,
"professional": false,
"total_problems": 10,
"nickname": "Jifei",
"menteeID": 4685146485686272,
"mentorHasArrived": false,
"rankingInGrp":1,
```

```
"group": 2
    "status": "GAME CLOSED",
    "mentee": "Zoey",
    "playerid": 5802887565279232,
    "solved_problems": 10,
    "flagUrl": "/static/flags/sg_on.png",
    "finished": "0:21:53.351620",
    "gravatar": "http://www.gravatar.com/avatar/bc6a8b2060d57f8df5177778c7f85cb7/?default=&s=30",
    "mentor": "",
    "mentorID": null,
    "professional": false,
    "total problems": 10,
    "nickname": "Ben Chan",
    "menteeID": 5170357531049984,
    "mentorHasArrived": false,
    "rankingInGrp":2,
    "group": 2
  },
"heatStopTime": "2013-12-11 19:31:21.814470",
"heatDescription": "Heat 1",
"tournamentID": 5060388987076608,
"tournamentDescription": "Prize round for Python Enrichment December 2013",
"roundID": 4912161075757056,
"heatID": 4691468476219392,
"heatStartTime": "2013-12-09 07:31:21.814470",
"roundDescription": "Prize Round",
"currentTime": "2014-01-09 09:38:59.184880",
"tournamentType": "Normal",
"type": "heat ranking",
```

```
"isGroup":true,
"tournamentStatus":"Closed"
```

Type: GET		Description: Use to remove mentor and only be able to be use by	
		the tournament director	
URL: /jsonapi/remove_mentor/:heatID/:playerID			
		d. Variable is taken from the URL.	
Response:		message	
{message: String}		Error message return if error occur else success	
Comments:			
API is created as a GET function instead of a POST (tournament-controller.js)			

Type: GET	Description:	
	Use to accept mentor on behalf	
LIDI. /isanani/assant for mantas/sheatID/splayarID	able to be done by the tourname	iit airector
URL: /jsonapi/accept_for_mentee/:heatID/:playerID	Devide and a Niconard and Maniphile in the Land for on the LIDI	
Parameters: heatID, playerID	Payload: No payload. Variable is taken from the URL.	
Response:	message	
{message: String}	Error message return if error occ	ur else success
Comments:		
API is created as a GET function instead of a POST (tournament-controller.js)		

Type: POST	Description:
	To set mentor arrival in the Singpath DB to True
<pre>URL: /jsonapi/mentor_has_arrived</pre>	
Payload :	Description:
{	1. playerID represent the current player ID
'playerID':integer,	2. heatID represent the current heat which the player is playing
'heatID':integer	
}	
Response:	Result
[{	Error message will be return if data POST is incorrect
'message': String	else a success message will be return.
}	
Comments:	
API is used in TournamentGameController.js	
74 13 daed in Todinamentodinecontrollerija	

Sample Payload of POST:/jsonapi/mentor has arrived

```
$scope.mentor_arrived =function(playerID, heatID){
   console.log("mentor arrived : heatID=" + heatID);
   var data = {
    'playerID':playerID,
    'heatID':heatID
   $scope.mentor arrival = $resource('/jsonapi/mentor has arrived');
   var hasArrived = new $scope.mentor_arrival(data);
   hasArrived.$save(function(response){
    if(response.error) {
     console.log(response.error);
    }else{
     console.log(response);
   });
   $scope.get mentor once(heatID, playerID);
   if($scope.mentor hasArrived == false){
    console.log("retrieving mentor again");
    $scope.timeoutVarMentor = $timeout(function(){$scope.mentor_arrived(playerID, heatID);}, 5000);
   }else if($scope.mentor_hasArrived == true){
    $timeout.cancel($scope.timeoutVarMentor);
Sample Output of POST:/jsonapi/mentor_has_arrived / - the expected output for the POST method
{'playerID':577645,'heatID':49222658423}
```

7. Events

Towns CET		Description
Type: GET		Description:
		Locks event ranking
<pre>URL: /jsonapi/lock_event_ranking</pre>		
Parameters:	Payload :	
id	Id - Id of event	
	id id or event	
Pagnongo:		
Response:		ID.
		ID
Not needed		Unique id for the event
Comments:		
Can only lock once, unable to unlock		
, , , , , , , , , , , , , , , , , , , ,		

Sample Output of GET:/jsonapi/lock_event_ranking)

Not needed

Type: GET	Description:	
	Gets event details with the specified eventID	
URL: /jsonapi/event/{eventID}	·	
Parameters:	Payload :	
Id	ld - Event id	
Response : example of the response body – include the name ar		
	The amount of participants the event is for	
{ 	ld	
"cutoff": int,	eventID	
"id": long,	archived	
"archived": boolean,	if true it means event has been deleted and it sho	ould
"time_to_cutoff": object,	not be seen anywhere in SingPath	
"start": dateTime,	time_to_cutoff	
"editor": int,	remaining time left till event is locked automatica	lly
"latitude": unknown,	start	
"ranking": array,	not in use (for countdown)	
"description": String,	editor	
"watching": int,	event creator id	
"cutoffdate": dateTime,	latitude	
"registered": int,	see longitude	
"path": String,	ranking	
"accepted": int,	array of participants information	
"rankinglocked": boolean,	description	
"name": String,	event description ranking locked – if true it means	s no
"created": dateTime,	one else can participate in the event	
"invited": int,	watching	
"venue": String,	number of users who clicked on 'I'd like to come	
"longitude": unknown,	watch'	
"participating": int,	cutoffdate	
"following": int,	if set it will trigger the countdown	
"responded": int	registered	
}	as long as user clicks on any one of the three but	tons

Comments: is there anything that needs to be noted?	'participant', 'watch', keep me posted', they are
If eventID not specified, it will return each and every event, else it will only return that specific	considered registered
event's details	path
	event path (programming language)
	accepted
	number of participants who have accepted the
	invitation and indicated that they will participate
	rankinglocked
	true if ranking is locked; will not allow any more users
	to participate
	name
	event name
	created
	when the event was created
	invited
	number of invites sent out
	venue
	venue of event
	longitude
	not in use
	participating
	number of users who clicked on "I'd like to participate
	following
	number of users who clicked on "keep me posted"
	responded
	number of invited participants who rsvp-ed

Sample Output of GET: /jsonapi/event/6095188913029120

"cutoff": 40,

"id": 6095188913029120,

"archived": false,

```
"time_to_cutoff": {},
"start": "2014-03-29T10:49:55.721590",
"editor": 57754,
"latitude": null,
"ranking": [],
"description": "Come join us for the National Singapore JC and High-school Coding Competition that will take place on the morning of March 29th, at 9am,
at SMU. The top 40 students who have registered their school and starting year will be invited. So register now and then go solve a few Python problems.
The grand prize for this event will be a MacBook Air.",
"watching": 5,
"cutoffdate": "2014-03-22T10:48:27.878890",
"registered": 85,
"path": "Python",
"accepted": 40,
"rankinglocked": true,
"name": "National Singapore JC and High-school Coding Competition",
"created": "2014-01-10T15:41:36.848030",
"invited": 40,
"venue": null,
"longitude": null,
"participating": 74,
"following": 6,
"responded": 40
```

Type: GET		Description:	
		Respond to invitation	
<pre>URL: /jsonapi/eventrsvp/{eventID}/{decisionNum}</pre>			
Parameters:	arameters: Payload:		
eventID	eventID – ID of ever	nt	
decisionNum	decisionNum – 0 or 1, 0 for reject 1 for accept		
Response:			
		N.A.	
Thank you for confirming that you will be attending.			
OR			
Thank you for confirming that you will NOT be attending.			
Comments:	ia accomandici la marcid		
No need to pass playerID, when entered into URL, will take the playerID that	is currently logged		
in to Singpath			

Sample Output of GET: /jsonapi/eventrsvp/6095188913029120/1

Thank you for confirming that you will be attending. **OR**

Thank you for confirming that you will NOT be attending.