

API Endpoint Specification

API Credentials

The `Team 5 - Beautiful Prose` project will use the `capiche-prototype` environment

```
1 apiKey: "AIzaSyCV6Lc-zb9_30SiYcBuk_rB05TFY_7Ma0U",
2 authDomain: "capiche-prototype.firebaseio.com",
3 baseApiUrl: 'https://capicheapi-x7a36bmr6a-uc.a.run.app',
```

Available pre-registered test users

username	password	user GUID
tester1@test.com	testing123	2yMckYvrkGWXmsGqSY6tlHt5vb2
tester2@test.com	testing123	wlsLFUqtd8alN777FyAspWY5SW1
tester3@test.com	testing123	n5lvnxHfBkhOylKDG17bZ7wFP8E3

▼

[POST] Sign up

Description

This endpoint creates a new user with email address and password

URL

https://identitytoolkit.googleapis.com/v1/accounts:signUp?key=[API_KEY]

Auth Required

No

Request Body Payload

Property Name	Type	Description
email	string	The email for the user to create.
password	string	The password for the user to create., simple password will not work like "123456", "admin"
returnSecureToken	boolean	Whether or not to return an ID and refresh token. Should always be true.

Response Payload

Property Name	Type	Description
idToken	string	A Firebase Auth ID token for the newly created user.
email	string	The email for the newly created user.
refreshToken	string	A Firebase Auth refresh token for the newly created user.
expiresIn	string	The number of seconds in which the ID token expires.
localId	string	The uid of the newly created user.

Sample response 200OK

```
1 {
2   "idToken": "[ID_TOKEN]",
3   "email": "[user@example.com]",
4   "refreshToken": "[REFRESH_TOKEN]",
5   "expiresIn": "3600",
6   "localId": "tRcfmLH7..."
7 }
```

Common error codes

- EMAIL_EXISTS: The email address is already in use by another account.
- OPERATION_NOT_ALLOWED: Password sign-in is disabled for this project.
- TOO_MANY_ATTEMPTS_TRY_LATER: We have blocked all requests from this device due to unusual activity. Try again later.

▼

[POST] Log in

Description

This endpoint can log in a user with email address and password

URL

https://identitytoolkit.googleapis.com/v1/accounts:signInWithPassword?key=[API_KEY]

Auth Required	No
---------------	----

Request Body Payload

Property Name	Type	Description
email	string	The email the user is signing in with.
password	string	The password for the account.
returnSecureToken	boolean	Whether or not to return an ID and refresh token. Should always be true.

Response Payload

Property Name	Type	Description
idToken	string	A Firebase Auth ID token for the authenticated user.
email	string	The email for the authenticated user.
refreshToken	string	A Firebase Auth refresh token for the newly created user.
expiresIn	string	The number of seconds in which the ID token expires.
localId	string	The uid of the authenticated user.
registered	boolean	Whether the email is for an existing account.
kind	string	"identitytoolkit#VerifyPasswordResponse"
displayName	string	""

Sample response 200OK

```
1 {
2   "kind": "identitytoolkit#VerifyPasswordResponse",
3   "localId": "ZY1rJK0eYLg...",
4   "email": "[user@example.com]",
5   "displayName": "",
6   "idToken": "[ID_TOKEN]",
7   "registered": true,
8   "refreshToken": "[REFRESH_TOKEN]",
9   "expiresIn": "3600"
10 }
```

Common error codes


- EMAIL_NOT_FOUND: There is no user record corresponding to this identifier. The user may have been deleted.
- INVALID_PASSWORD: The password is invalid or the user does not have a password.
- TUSER_DISABLED: The user account has been disabled by an administrator.

Error response format for the APIs above

Anytime an error is returned from the backend server for any of the APIs above, the response will have the following format.

```
1 {
2   "error": {
3     "errors": [
4       {
5         "domain": "global",
6         "reason": "invalid",
7         "message": "CREDENTIAL_TOO_OLD_LOGIN_AGAIN"
8       }
9     ],
10    "code": 400,
11    "message": "CREDENTIAL_TOO_OLD_LOGIN_AGAIN"
12  }
13 }
```

The error code is obtained from the message field. All of the above error codes refer to the message field content.

Reference:  [Firebase Auth REST API](#)

[POST] get suggestions

Description	This endpoint takes user's text as input and return a list of word suggestions
URL	https://capicheapi-x7a36bmr6a-uc.a.run.app/v1/getSuggestions/


```
36     }
37     ],
38     "wordCorrectnessStatus": "Incorrectly spell"
39 }
40 ]
```

Common error codes

- TOKEN_EXPIRED:

```
1 {
2   "code": "auth/id-token-expired",
3   "message": "Firebase ID token has expired. Get a fresh ID token from your client app and try again (auth/id-token-expired). See
4   https://firebase.google.com/docs/auth/admin/verify-id-tokens for details on how to retrieve an ID token."
5 }
```

- INVALID(NON ALPHABET)/EMPTY_INPUT:

```
1 [ ]
```

▼ [GET] get user dictionary

Description	This endpoint retrieves the user's own dictionary
URL	https://capicheapi-x7a36bmr6a-uc.a.run.appv1/userDictionary/[localId]
Auth Required	Yes, uses idToken for Bearer Token

Response Payload

An array of a data structure described in the following table:

Property Name	Attributes	Type	Description
word		string	the a historic original input word of the user from text editor
suggestions[]		abstract array	a data struct array that store a list of suggestions for the input word
	suggestedWord	string	the suggested word based on the input word
	definition	string	the definition/meaning of the suggested word
	rank	integer	the position of the suggested word should be placed in the suggestion list

Sample response 200OK

Assume the user input "Hi abc" in the past history.

```
1 [
2   {
3     "word": "Hi",
4     "suggestions": [
5       {
6         "suggestedWord": "I",
7         "definition": "1. I, the ninth letter of the English alphabet, takes its form from the Phoenician, through the Latin and the Greek.",
8         "rank": 0
9       },
10      {...},
11      ...
12      {...}
13    ]
14  },
15  {
16    "inputWord": "abc",
17    "suggestions": [
18      {
19        "suggestedWord": "ibis",
20        "definition": "Any bird of the genus Ibis and several allied genera, of the family IbirdÃ|, inhabiting both the Old World and the New.",
21        "rank": 0
22      },
23      {
24        "suggestedWord": "abyss",
25        "definition": "1. A bottomless or unfathomed depth, gulf, or chasm; hence, any deep, immeasurable, and, specifically, hell, or the bottomless
26        pit.",
27        "rank": 1
28      }
29    ]
30  }
31 ]
```

Common error codes

- TOKEN_EXPIRED:

```
1 {
2   "code": "auth/id-token-expired",
3   "message": "Firebase ID token has expired. Get a fresh ID token from your client app and try again (auth/id-token-expired). See
4             https://firebase.google.com/docs/auth/admin/verify-id-tokens for details on how to retrieve an ID token."
5 }
```

- NEW USER/EMPTY HISTORY:

```
1 The server encountered an error: Could not retrieve dictionary
```

▼ [POST] word replacement

☐ @Haolin Feng to complete documentation

This endpoint should be called with the replacement data on each occasion that the user uses a suggestion to make a replacement in the editor