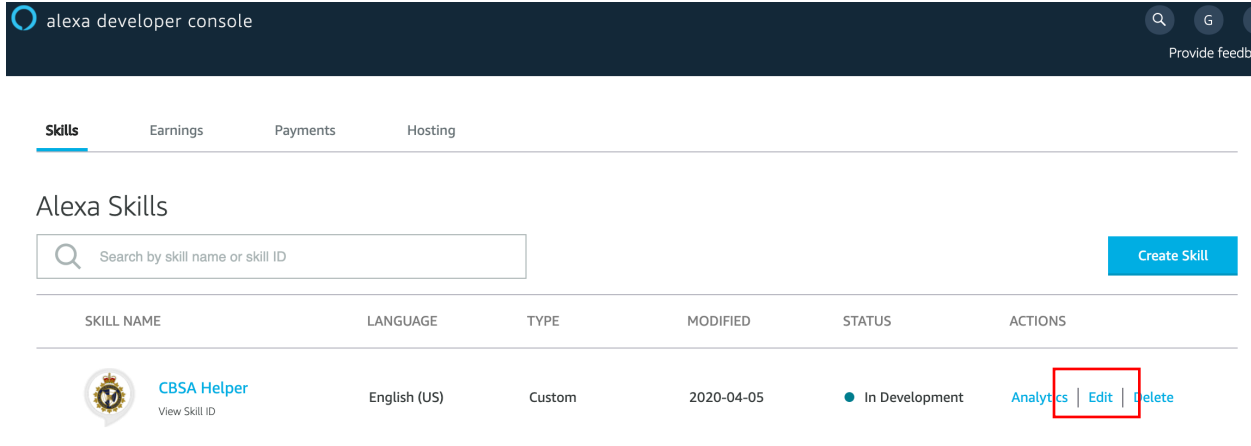



## ADDING A NEW INTENT

### Alexa Console

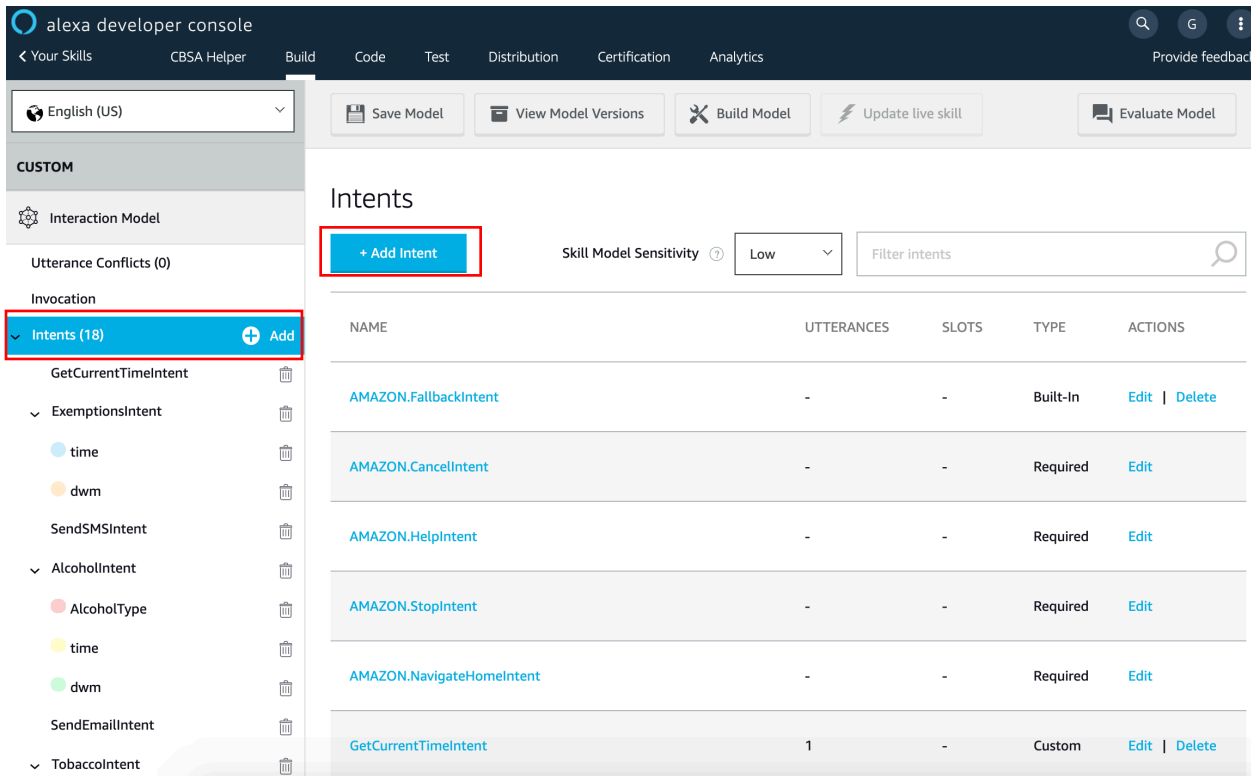
Open Alexa's dev console and click on **Edit** to edit your skill:



The screenshot shows the 'Skills' tab in the Alexa Developer Console. At the top, there's a search bar labeled 'Search by skill name or skill ID' and a 'Create Skill' button. Below this is a table of skills. The first skill listed is 'CBSA Helper' with a status of 'In Development'. The 'ACTIONS' column for this skill contains links for 'Analytics', 'Edit', and 'Delete'. The 'Edit' link is highlighted with a red box.

SKILL NAME	LANGUAGE	TYPE	MODIFIED	STATUS	ACTIONS
 CBSA Helper View Skill ID	English (US)	Custom	2020-04-05	In Development	<a href="#">Analytics</a>   <a href="#">Edit</a>   <a href="#">Delete</a>

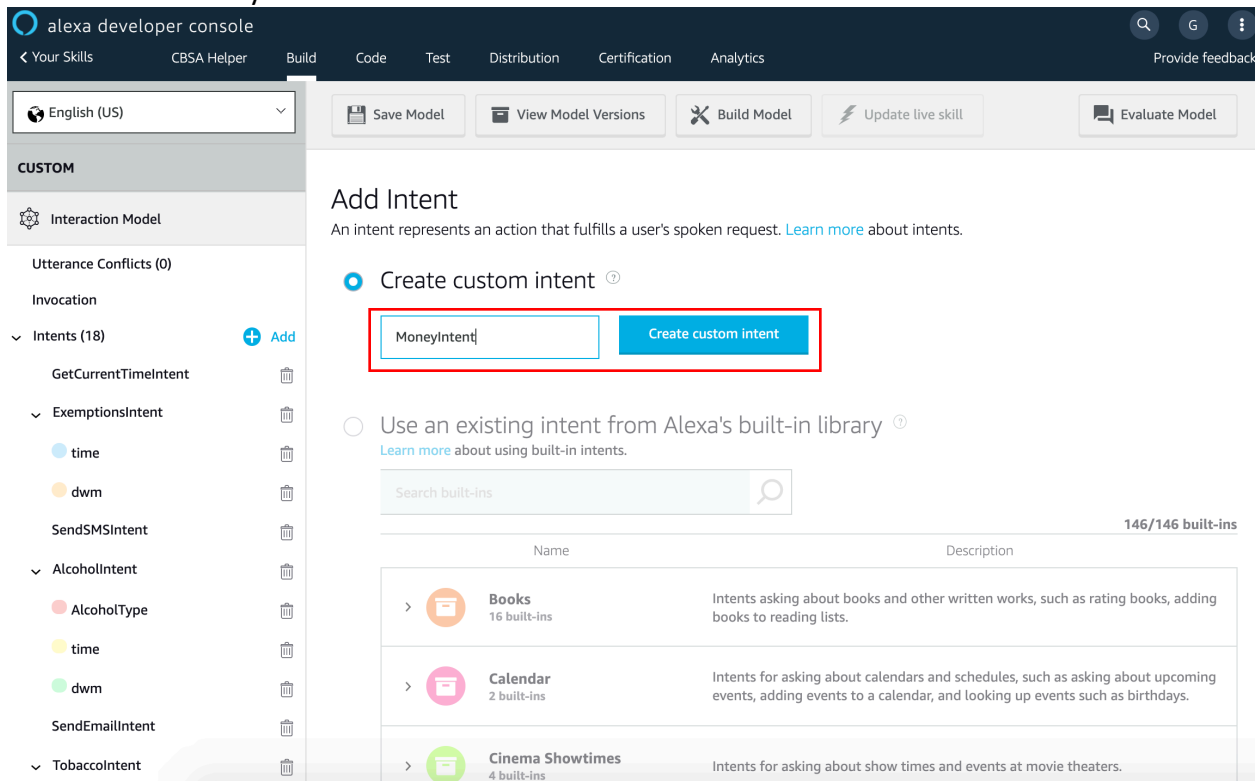
Click on the button **+Add Intent** or **Add** button on Intents:



The screenshot shows the 'Intents' page in the Alexa Developer Console. On the left sidebar, the 'Intents (18)' section is expanded and highlighted with a red box, showing a '+ Add' button. The main area displays a table of intents. At the top of this area, there is a '+ Add Intent' button, also highlighted with a red box. The table lists several built-in and custom intents. The 'GetCurrentTimeIntent' is highlighted in blue at the bottom of the list.

NAME	UTTERANCES	SLOTS	TYPE	ACTIONS
AMAZON.FallbackIntent	-	-	Built-In	<a href="#">Edit</a>   <a href="#">Delete</a>
AMAZON.CancelIntent	-	-	Required	<a href="#">Edit</a>
AMAZON.HelpIntent	-	-	Required	<a href="#">Edit</a>
AMAZON.StopIntent	-	-	Required	<a href="#">Edit</a>
AMAZON.NavigateHomeIntent	-	-	Required	<a href="#">Edit</a>
GetCurrentTimeIntent	1	-	Custom	<a href="#">Edit</a>   <a href="#">Delete</a>

Define a name for your intent and click **Create**:



alex developer console

< Your Skills CBSA Helper Build Code Test Distribution Certification Analytics Provide feedback

English (US)

Save Model View Model Versions Build Model Update live skill Evaluate Model

**CUSTOM**

Interaction Model

Utterance Conflicts (0)

Invocation

Intents (18) **Add**

- GetCurrentTimeIntent
- ExemptionsIntent
  - time
  - dwm
- SendSMSIntent
- AlcoholIntent
  - AlcoholType
  - time
  - dwm
- SendEmailIntent
- TobaccoIntent

### Add Intent

An intent represents an action that fulfills a user's spoken request. [Learn more](#) about intents.

☒ Create custom intent <sup>?</sup>

MoneyIntent **Create custom intent**

☐ Use an existing intent from Alexa's built-in library <sup>?</sup>

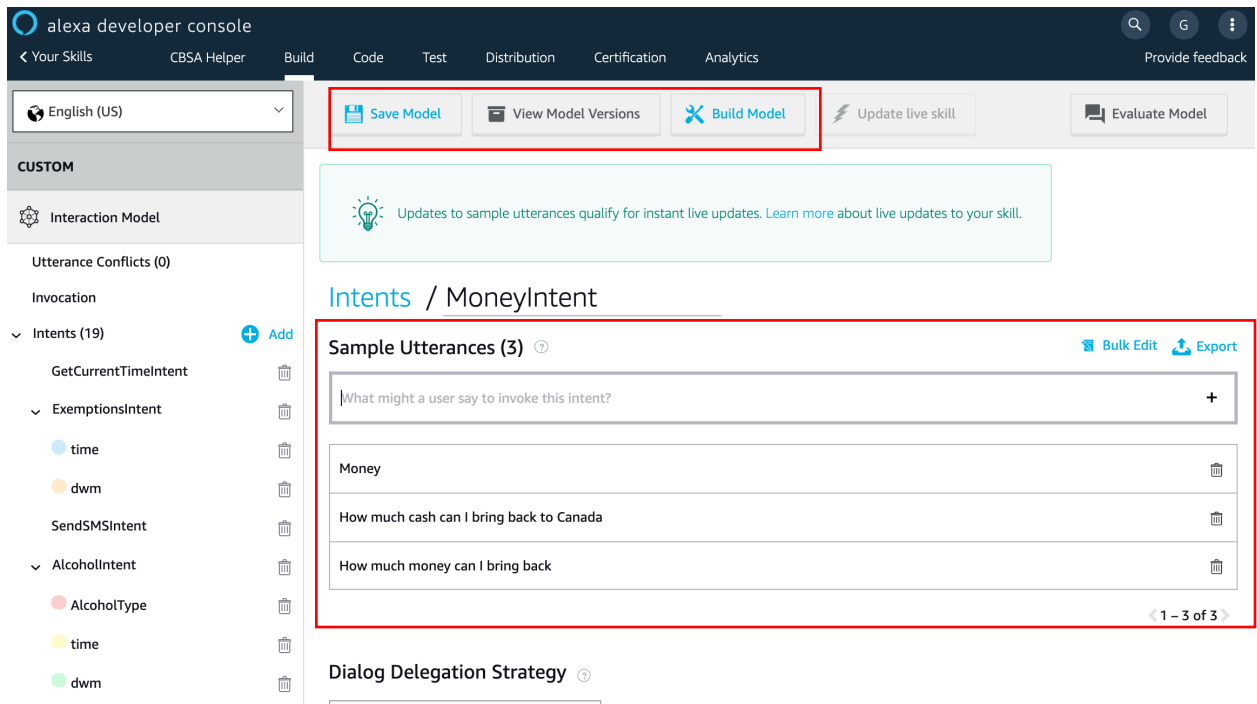
[Learn more](#) about using built-in intents.

Search built-ins

146/146 built-ins

Name	Description
<b>Books</b> 16 built-ins	Intents asking about books and other written works, such as rating books, adding books to reading lists.
<b>Calendar</b> 2 built-ins	Intents for asking about calendars and schedules, such as asking about upcoming events, adding events to a calendar, and looking up events such as birthdays.
<b>Cinema Showtimes</b> 4 built-ins	Intents for asking about show times and events at movie theaters.

Add some example phrases and words that will be used for the AI to trigger this intent, then click on **Build** and after click on **Save**:



alex developer console

< Your Skills CBSA Helper Build Code Test Distribution Certification Analytics Provide feedback

English (US)

Save Model View Model Versions **Build Model** Update live skill Evaluate Model

**CUSTOM**

Interaction Model

Utterance Conflicts (0)

Invocation

Intents (19) **Add**

- GetCurrentTimeIntent
- ExemptionsIntent
  - time
  - dwm
- SendSMSIntent
- AlcoholIntent
  - AlcoholType
  - time
  - dwm

Updates to sample utterances qualify for instant live updates. [Learn more](#) about live updates to your skill.

### Intents / MoneyIntent

**Sample Utterances (3)** <sup>?</sup> [Bulk Edit](#) [Export](#)

What might a user say to invoke this intent?

Money

How much cash can I bring back to Canada

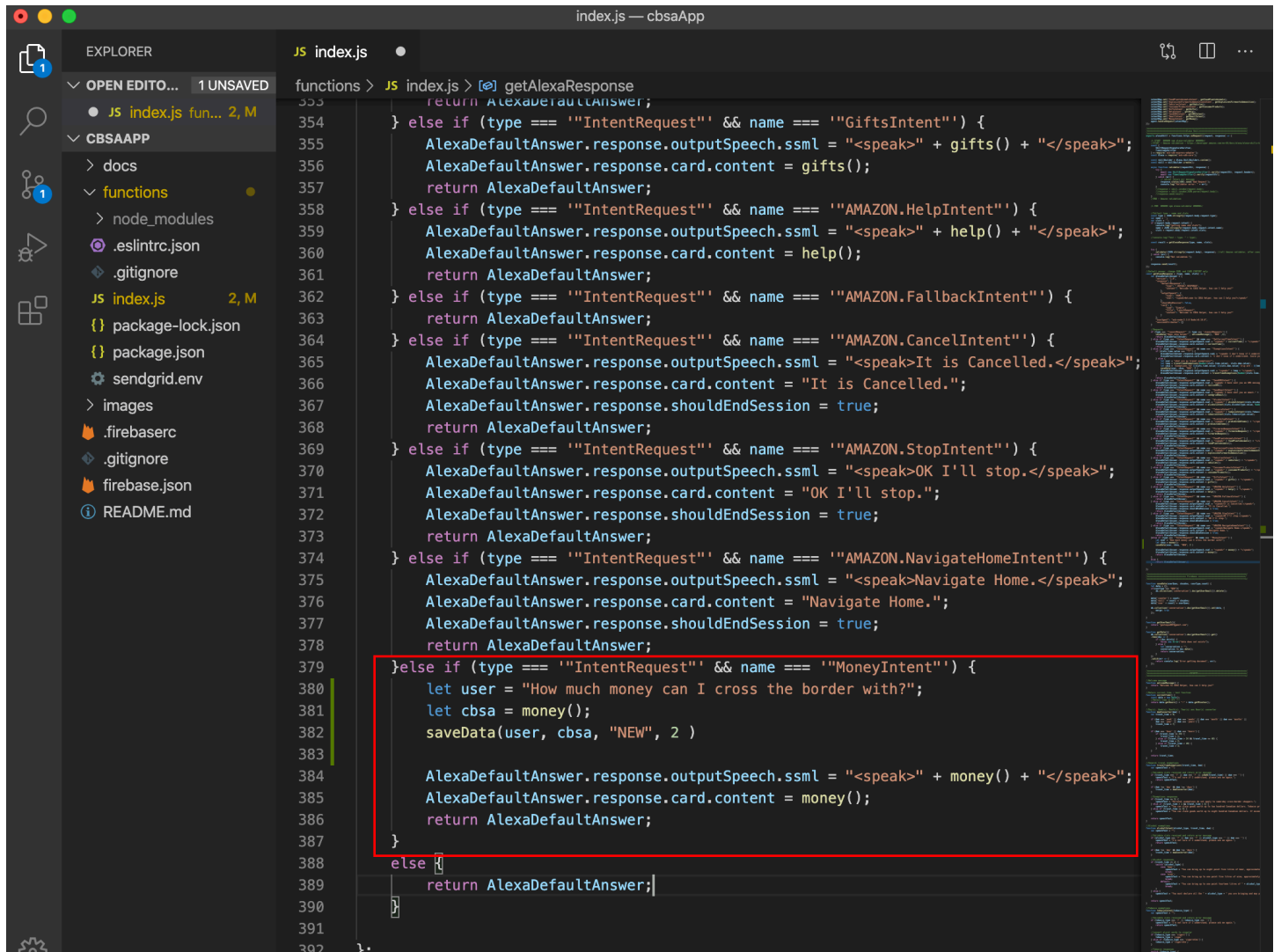
How much money can I bring back

1 - 3 of 3

**Dialog Delegation Strategy** <sup>?</sup>

## Code for Alexa

Open index.js on functions folder. Find the Alexa section, and add an else if statement for the new Intent as follows:



```
index.js — cbsaApp
EXPLORER
  OPEN EDITOR... 1 UNSAVED
  • JS index.js fun... 2, M
  CbsaAPP
    docs
    functions
      node_modules
      .eslintrc.json
      .gitignore
      JS index.js 2, M
      package-lock.json
      package.json
      sendgrid.env
    images
      .firebaserc
      .gitignore
      firebase.json
      README.md

functions > JS index.js > [?] getAlexaResponse
353   return AlexaDefaultAnswer;
354 } else if (type === "IntentRequest" && name === "GiftsIntent") {
355   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>" + gifts() + "</speack>";
356   AlexaDefaultAnswer.response.card.content = gifts();
357   return AlexaDefaultAnswer;
358 } else if (type === "IntentRequest" && name === "AMAZON.HelpIntent") {
359   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>" + help() + "</speack>";
360   AlexaDefaultAnswer.response.card.content = help();
361   return AlexaDefaultAnswer;
362 } else if (type === "IntentRequest" && name === "AMAZON.FallbackIntent") {
363   return AlexaDefaultAnswer;
364 } else if (type === "IntentRequest" && name === "AMAZON.CancelIntent") {
365   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>It is Cancelled.</speack>";
366   AlexaDefaultAnswer.response.card.content = "It is Cancelled.";
367   AlexaDefaultAnswer.response.shouldEndSession = true;
368   return AlexaDefaultAnswer;
369 } else if (type === "IntentRequest" && name === "AMAZON.StopIntent") {
370   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>OK I'll stop.</speack>";
371   AlexaDefaultAnswer.response.card.content = "OK I'll stop.";
372   AlexaDefaultAnswer.response.shouldEndSession = true;
373   return AlexaDefaultAnswer;
374 } else if (type === "IntentRequest" && name === "AMAZON.NavigateHomeIntent") {
375   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>Navigate Home.</speack>";
376   AlexaDefaultAnswer.response.card.content = "Navigate Home.";
377   AlexaDefaultAnswer.response.shouldEndSession = true;
378   return AlexaDefaultAnswer;
379 } else if (type === "IntentRequest" && name === "MoneyIntent") {
380   let user = "How much money can I cross the border with?";
381   let cbsa = money();
382   saveData(user, cbsa, "NEW", 2 );
383
384   AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>" + money() + "</speack>";
385   AlexaDefaultAnswer.response.card.content = money();
386   return AlexaDefaultAnswer;
387 }
388 else {
389   return AlexaDefaultAnswer;
390 }
391
392 }
```

Note that the code have the call to the function that saves the conversation firstly:

```
else if (type === "IntentRequest" && name === "MoneyIntent") {
  let user = "How much money can I cross the border with?";
  let cbsa = money();
  saveData(user, cbsa, "NEW", 2 )

  AlexaDefaultAnswer.response.outputSpeech.ssmml = "<speack>" + money() + "</speack>";
  AlexaDefaultAnswer.response.card.content = money();
  return AlexaDefaultAnswer;
}
```


## Dialogflow Console

Open Dialogflow and click on the Agent you want to edit:

Open the side menu and click on **Intents**:

Click on **Create Intent**:

Add the Intent **Name**, the **Training Phrases** and on the **Fulfillment** section enable **webhook for the intent** and then click on **Save**:



● MoneyIntent

SAVE

Training phrases ⓘ

Search training phrases 🔍 ^

” Add user expression

” Money

” How much cash can I bring back to Canada

” How much money can I bring back

Action and parameters


Responses ⓘ

Fulfillment ⓘ


☒ Enable webhook call for this intent

☐ Enable webhook call for slot filling

Try it now

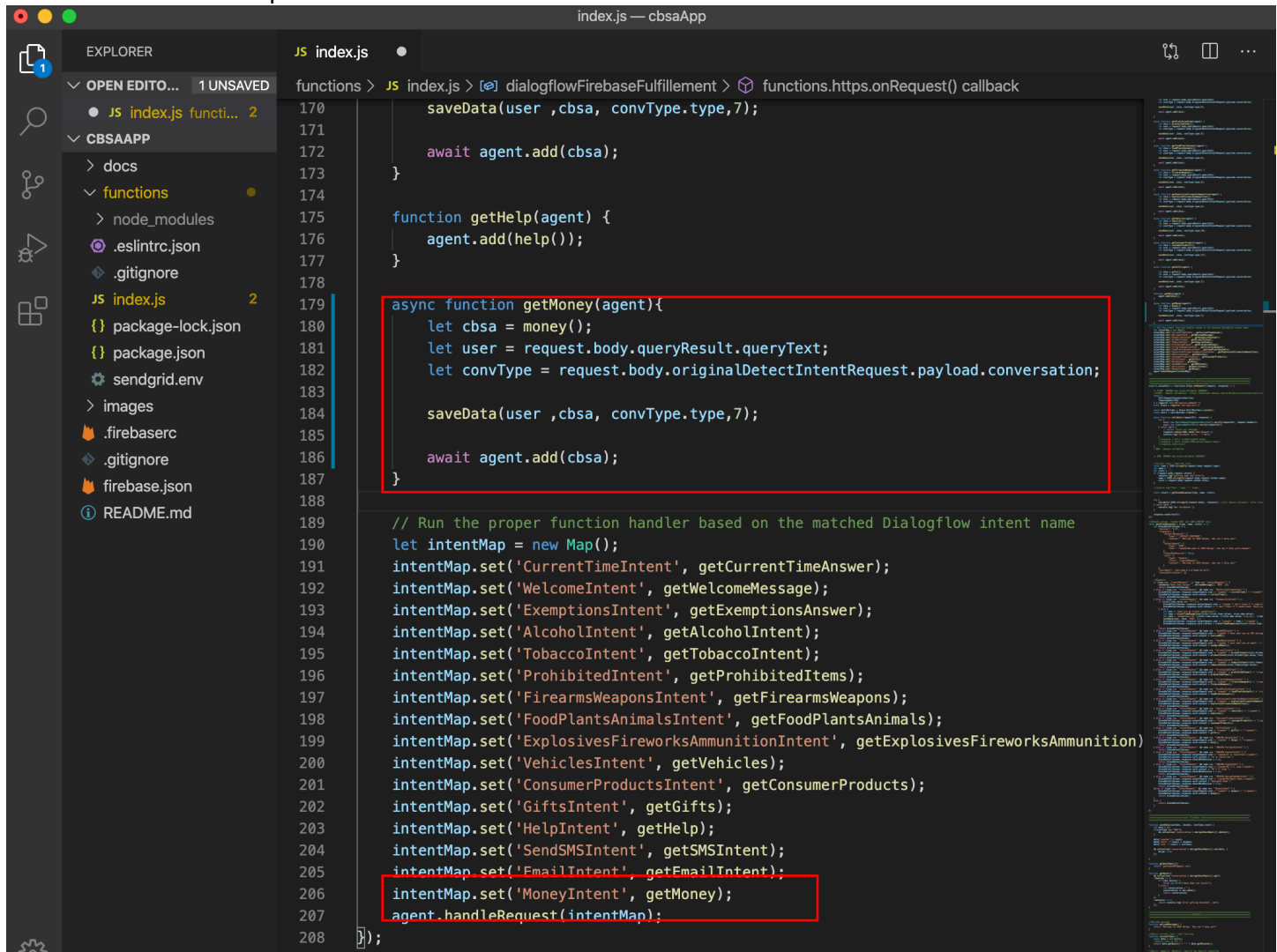


ⓘ Please use test console above to try a sentence.

 See how it works in [Google Assistant](#). [↗](#)

## Code for Dialogflow:

Open index.js on functions folder. Find the Dialogflow section, and add a function for the new Intent and map the intent on intentMap as follows:



```
index.js — cbsaApp

EXPLORER
  OPEN EDITOR... 1 UNSAVED
  • JS index.js functi... 2
  CbsaAPP
    > docs
    > functions
      > node_modules
      .eslintrc.json
      .gitignore
      JS index.js 2
      {} package-lock.json
      {} package.json
      .sendgrid.env
    > images
    .firebaserc
    .gitignore
    firebase.json
    README.md

functions > JS index.js > [?] dialogflowFirebaseFulfillment > functions.https.onRequest() callback
170   saveData(user ,cbsa, convType.type,7);
171
172   await agent.add(cbsa);
173 }
174
175 function getHelp(agent) {
176   agent.add(help());
177 }
178
179 async function getMoney(agent){
180   let cbsa = money();
181   let user = request.body.queryResult.queryText;
182   let convType = request.body.originalDetectIntentRequest.payload.conversation;
183
184   saveData(user ,cbsa, convType.type,7);
185
186   await agent.add(cbsa);
187 }
188
189 // Run the proper function handler based on the matched Dialogflow intent name
190 let intentMap = new Map();
191 intentMap.set('CurrentTimeIntent', getcurrentTimeAnswer);
192 intentMap.set('WelcomeIntent', getWelcomeMessage);
193 intentMap.set('ExemptionsIntent', getExemptionsAnswer);
194 intentMap.set('AlcoholIntent', getAlcoholIntent);
195 intentMap.set('TobaccoIntent', getTobaccoIntent);
196 intentMap.set('ProhibitedIntent', getProhibitedItems);
197 intentMap.set('FirearmsWeaponsIntent', getFirearmsWeapons);
198 intentMap.set('FoodPlantsAnimalsIntent', getFoodPlantsAnimals);
199 intentMap.set('ExplosivesFireworksAmmunitionIntent', getExplosivesFireworksAmmunition);
200 intentMap.set('VehiclesIntent', getVehicles);
201 intentMap.set('ConsumerProductsIntent', getConsumerProducts);
202 intentMap.set('GiftsIntent', getGifts);
203 intentMap.set('HelpIntent', getHelp);
204 intentMap.set('SendSMSIntent', getSMSIntent);
205 intentMap.set('EmailIntent', getEmailIntent);
206 intentMap.set('MoneyIntent', getMoney);
207 agent.handleRequest(intentMap);
208
209
```

The code will look like this:

-Function:

```
async function getMoney(agent){
  let cbsa = money();
  let user = request.body.queryResult.queryText;
  let convType = request.body.originalDetectIntentRequest.payload.conversation;

  saveData(user ,cbsa, convType.type,7);

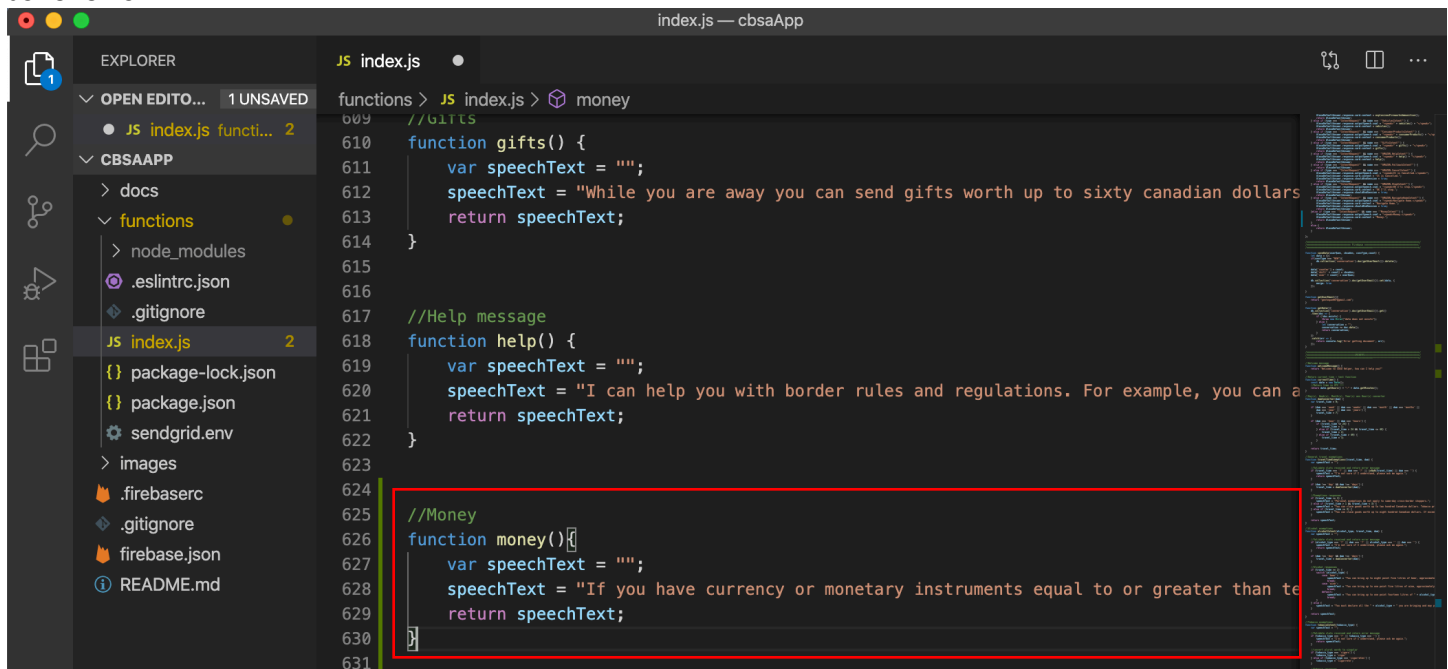
  await agent.add(cbsa);
}
```

-intentMap:

```
intentMap.set('MoneyIntent', getMoney);
```

## Coding the Answer

Open index.js on functions folder. Find the Answers section, and add a function for the new Intent Response as follows:



```
index.js — cbsaApp

EXPLORER
  OPEN EDITOR... 1 UNSAVED
  • JS index.js functi... 2
  CBSAAPP
    docs
    functions
      node_modules
      .eslintrc.json
      .gitignore
      JS index.js 2
      {} package-lock.json
      {} package.json
      {} sendgrid.env
    images
    .firebaserc
    .gitignore
    firebase.json
    README.md

functions > JS index.js > money
609 //GIFTS
610 function gifts() {
611   var speechText = "";
612   speechText = "While you are away you can send gifts worth up to sixty canadian dollars";
613   return speechText;
614 }
615
616
617 //Help message
618 function help() {
619   var speechText = "";
620   speechText = "I can help you with border rules and regulations. For example, you can a";
621   return speechText;
622 }
623
624
625 //Money
626 function money(){
627   var speechText = "";
628   speechText = "If you have currency or monetary instruments equal to or greater than te";
629   return speechText;
630 }
631
```

```
//Money
function money(){
  var speechText = "";
  speechText = "If you have currency or monetary instruments equal to or greater than ten thousand
canadian dollars (or the equivalent in a foreign currency) in your possession when arriving in or departing from
Canada, you must report this to the CBSA.";
  return speechText;
}
```

## Final steps

- Push your code to GitHub
- Deploy your code to Firebase