

JOVO FRAMEWORK FOR GOOGLE AND ALEXA REPORT

By Nikkolos Diehl

Jovo is an open-source framework for voice apps. Build one code base that works on both Amazon Alexa and Google Assistant and Jovo automatically builds the code base used for either/both platforms. Jovo includes analytics + database integrations and more.

<https://github.com/jovotech/jovo-framework>

Pros:

- Very easy handling, especially for non-coders or beginners. The entire code base is extremely easy to understand and very clearly laid out. There is clear and understandable stateful and stateless intents and all you have to worry about at its core is intents and how the machine replies to the user
- There is an abundance of documentation that is clean and clear. It's built with a deep understanding of the development of voice experiences.
- Auto generated code for both Alexa and Google and the language model in JSON allows for a clear and easy to understand the connection between the two platforms.
- Jovo allows for simple user routing. You can force the user into a state in which only a select few intents are allowed with inbuilt unhandled intents as shown here:

```
app.setHandler({
  LAUNCH() {
    this.followUpState('OnboardingState')
      .ask('Yes or No?');
  },

  OnBoardingState: {
    YesIntent() {
      //
    },

    NoIntent() {
      //
    },

    Unhandled() {
      //
    },
  },
});

// Learn more here: https://www.jovo.tech/docs/routing/states
```

- There is an inbuilt database integrations + an inbuilt voice building/speech builder system that allows you to build a voice with many different options for voice control.

- There is an in-built visual output code base for building the UI of the application that auto generates code for both Alexa and Google
- Extremely easy to install and run either locally or on a server or on AWS lambda. It uses NPM.

Cons:

- The amazon and google platforms are both still being worked on and Jovo is updated weekly to fix small bugs here and there
- State based intents are still a little bit buggy and me and my teammates working on Jovo with me have agreed that in its current state, Jovo state routing is causing small issues
- The documentation is still being worked on and there definitely should be more examples and explanation
- Jovo is *fully* open source as it is a free framework for voice developers made by voice developers. Because of this there is no 100% guarantee that this product will continue to be supported and it is possible, with the predicted expansion of voice applications that Jovo may become a subscription or paid based system or fall apart entirely.

Features:

- Basic Concepts:
 - Command Line tools
 - Routing
 - Data input
 - Speech and visual output
- Advanced Features
 - Input validation
 - User object
 - Speech Builder
 - I18n (create multilingual voice apps)
 - Jovo persistence layer 9persists user specific data
 - Jovo analytics layer
 - Staging
 - Plugins
 - Testing
- Amazon Alexa specific features:
 - Audio player
 - Video appo
 - Alexa cards
 - Alexa Device Address
 - Alexa lists
 - Alexa verifier
 - Alexa Verifier
 - Alexa Dialog interface
 - Echo show render templates
 - Progessive responses
 - Skill events
 - CanFulfillIntentRequest
 - Game Engine
 - Gadget Controller

- In-Skill-Purchasing (ISP)
 - Amazon pay
 - Reminders API
 - Settings API
 - Proactive Events API
 - Playback controller
- Google Assistant specific features
 - Google Assistant cards
 - Suggestion chips
 - Location
 - Media Response
 - Push Notifications
 - Transactions
- Database integrations
 - File persistence
 - DynamoDB
 - MongoDB
 - MySQL
 - Google Datastore
 - Azure Cosmos DB
 - Google firestore
- Analytics Integrations
 - Dashbot
 - Bespoken Analytics
 - Chatbase
 - Botanalytics
- CMS integrations
 - Google sheets
 - Airtable
- CLI integrations
 - Bst proxy
 - Nodemon