Lab Assistant

Lab Assistants come in during a free period to assist the Computer Programming Instructor with teaching the 9th and 10th grade classes. ***This position is a graded class in addition to your shop!*** You must be available every class for B1, B2, or A4. Speak with your guidance counselor if you think you will be able to drop an elective for this class.

Responsibilities include:

* Assisting lower classmen with questions related to coursework
* Maintaining the classroom equipment
* Assisting in preparing for lower classes
* Creating lessons to present to lower classes

IRLTech

IRLTech seeks to interface our real world with software. Potential projects include scanners to scan student id’s for quick pass creation/ending, NFC enabled pogs for games that track stats, and computer vision to see and identify pogs to interface real life games with the internet.

All applicants must be willing to self-teach. Skills in this company are outside of the normal scope for this class, but are appropriate for students of this grade level.

## Hardware Developer

Hardware Developer will experiment with and design hardware that can capture information and send it back to a computer for processing. They will work with the Interface and API developer to make it useful for other applications. Potential applicants should have experience with or a willingness to self-teach the following:

* barcode scanners and/or NFC
* Arduino and/or other microcontroller platforms
* C++
* Printed Circuit Board (PCB) design, especially in KiCAD or EagleCAD

## Interface and API Developer

Interface and API Developer takes data collected from the hardware developed by the Hardware Developer and turns it into usable signals for other applications.

Potential applicants should have experience with or a willingness to self-teach the following:

* serial protocols and interfacing
* Nodejs and ExpressJS
* REST APIs

Jukebar

Develop an application that users can log into, and with the appropriate class permissions, either play sounds from a list of preinstalled sounds, play the audio from a youtube video, or control a spotify account remotely.

## Senior Developer

Senior Developers are responsible for managing and developing the project. Senior Developer works with Formbar and other 3rd party APIs (such as Youtube and Spotify) to integrate functions from those applications into Jukebar. The Senior Developer is responsible for all duties of the Frontend and Backend Developers as listed below, unless they choose to subcontract.

Potential applicants should have experience with or a willingness to self-teach the following:

* REST APIs
* Formbar Oauth
* Javascript Libraries

# Contract Jobs

Employees of Jukebar may need to hire temporary positions as follows:

## Frontend Developer

Frontend developer works with the backend developer and archivist to create a user-friendly interface online for navigating the service. Potential applicants should have experience with or a willingness to self-teach the following:

* EJS templates
* Working with Javascript in the browser
* Extensive experience with CSS for interface styling
* Websockets

## Backend Developer

Backend Developer handles user requests for information and retrieving information from the database, along with application functionality. Potential applicants should have experience with or a willingness to self-teach the following:

* SQLite3
* Nodejs and ExpressJS
* Websockets

Formbar.js

Formbar.js is the flagship product of YorkTechApps. Only highly competent and motivated canidates are considered.

## Senior Developer

Senior developers are responsible for solving issues in the repo weekly, according to project goals. They will also assist third parties with interfacing with the Formbar API. They may also assist users, especially teachers, with technical support. Potential applicants should have experience with the following:

* NodeJS, Javascript
* SQL Databases
* Advanced Github features, including branches, projects, issues, pull requests
* Team development
* Developing or using APIs
* Code Reviews, Merging Pull Requests and managing projects/branches/repos

## Junior Developer

Junior developers work to gain experience and continue the generational development of Formbar.js. Junior developers will complete work assigned to them by Senior Developers, and develop familiarity with and skills required to develop Formbar.js. Canidates must display competency in the following:

* Javascript
* SQL Databases
* Github
* Team development
* Using APIs

# Contract Jobs

Senior Developers of Formbar.js may need to hire temporary positions as follows:

## Frontend Developer

Frontend developer works with the backend developer and archivist to create a user-friendly interface online for navigating the service. Potential applicants should have experience with or a willingness to self-teach the following:

* EJS templates
* Working with Javascript in the browser
* Extensive experience with CSS for interface styling
* Websockets

RPG Maker Specialist

This company is a single position.

## RPG Maker Specialist

The two major responsibilities of the RPG Maker Specialist are developing and refining challenges for the 9th grade class, and developing plugins for RPG Maker MZ to be used in the class

Potential applicants should have experience with or a willingness to self-teach the following:

* RPG Maker and RPG Maker Plugins API
* Formbar API, including HTTP and Websockets
* Microsoft Word and Visio

QuizBank

QuizBank adds and generates questions by Course, Unit, and Task for providing to third-parties by API or by zip output for input into Schoology or third party applications.

## Senior Developer

The Senior Developer is responsible for project management and development of QuizBank.

Potential applicants should have experience with or a willingness to self-teach the following:

* API Development
* Javascript and NodeJS
* SQL Databases
* Github Project Management

# Contract Jobs

Senior Developers of Formbar.js may need to hire temporary positions as follows:

## Frontend Developer

Frontend developer works with the Senior developer to create a user-friendly interface online for navigating the service. Potential applicants should have experience with or a willingness to self-teach the following:

* EJS templates
* Working with Javascript in the browser
* Extensive experience with CSS for interface styling
* Websockets

Pogipedia

Pogipedia is the new, from the ground-up, software for archiving and tracking all of the pogs in the classroom.

# Senior Developer

Senior Developer is responsible for project management, and all positions listed below.

# Contract Jobs

Senior Developers of Pogipedia may need to hire temporary positions as follows:

## Archivist and API Developer

The Archivist position is responsible for entering new pogs and pog varieties into the database. This includes creating images of pogs and tracking specific information about them. As an API Developer, you will also make the information available via REST API. Potential applicants should have experience with or a willingness to self-teach the following:

* Table data entry
* Digital cameras and image editing
* People skills to collect data about pogs from students
* Basic Nodejs skills to create REST APIs providing pog information

## Frontend Developer

Frontend developer works with the backend developer and archivist to create a user-friendly interface online for browsing the variety of pogs available to students. Potential applicants should have experience with or a willingness to self-teach the following:

* EJS templates
* Working with Javascript in the browser
* Extensive experience with CSS for interface styling

## Backend Developer

Backend Developer handles user requests for information and retrieving information from the database. The database must be kept up to date with all of the information provided by the archivist. Potential applicants should have experience with or a willingness to self-teach the following:

* SQLite3
* Nodejs and ExpressJS

Applying for a Position

* Note that “Senior” and “Junior” do not refer to your grade level, but the position title.
* Create a resume, portfolio, and cover letter
* Email them to [csmith@ytech.edu](mailto:csmith@ytech.edu)
  + You may use your email as your cover letter
  + Be specific about which position(s) you are applying for, why you want them, and why you are qualified for them.
* Unserious or humorous applications will not be considered
* The same way your boss does not pay you to fill out applications for other jobs, applying for this job should be done on your own time.