

Each team is different, and each one has different skill sets and different needs. We can work with you to build the curriculum that's right for you.

Your team learns exactly what it needs to get started building cutting edge Lianja Apps.

Customize your training even further by having Lianja Software engineers create a prototype of your App and then use the prototype as part of the training materials.

There is no better way to learn how Lianja best practices apply to your project than to see it done by an expert.

These courses will be arranged periodically in different geographic regions or can be arranged on-site at customer premises by customer request. They can also be customized for individual customers' needs and requirements.

[Contact us](#) to discuss what training is best suited to you.

### **Why attend a Lianja training course?**

- Reduce your learning curve and gain a proper understanding of the Lianja Platform.
- Get your Lianja applications into production quicker.
- Network with other Lianja developers and the Lianja team.
- Get certified. Receive a personalized "Lianja Training Certificate" for each course attended.

### **Course overview**

Each course duration is 5 days. Lunch is included in the course price. Flights, hotels and other transportation costs are not included in these course fees.

The cost of each course for a minimum of 10 attendees is \$10k. So if there are 10 attendees it is \$1k per person with no software license included. (Bring your own license). The minimum cost per attendee is \$1k. The maximum number of course attendees is 30.

If course attendees require a software license the course cost is \$2500 which includes an App Builder and a free Cloud Server license. This provides a big saving on a license as the App Builder license subscription is \$999 and the Cloud Server Standard Edition license subscription is \$999.

## Course Details

[Course 1 - Lianja for Beginners](#)

[Course 2 - Lianja for Intermediate Developers](#)

[Course 3 - Lianja for Advanced Developers](#)

[Course 4 - Lianja for Desktop App Development](#)

[Course 5 - Lianja for Web App Development](#)

[Course 6 - Lianja for Mobile App Development](#)

### **Course 1 - Lianja for Beginners. Duration 5 days.**

- Introducing Lianja.
- Overview of the Lianja Platform.
- Getting started with the Lianja App Builder.
- An overview of the development workspaces.
- Creating a database and its tables.
- Lianja app architecture.
- An introduction to NoCode.

- Understanding agile development using live app views
- The anatomy of a Lianja app: Pages, Sections, Fields and Gadgets.
- The anatomy of a page.
- The anatomy of a section.
- Fields and gadgets.
- Visual development with standard sections and NoCode.
- Understanding attributes and delegates.
- Understanding just-in-time script compilation.
- Understanding data binding.
- Understanding the Lianja Object Model (LOM).
- Understanding macro substitution.
- Understanding Dynamic Data Views.
- Lianja is all about ART. What is ART?
- Understanding page rendering: section relationships, headers, footers and sidebars.
- Understanding Single Page Applications (SPA).
- UI Navigation Techniques.
- Testing desktop apps by switching to Desktop App View.
- Client-side and server-side data validation.
- Data import and export.
- Lianja best practices for cross platform, cross device applications.
- An introduction to Virtual Tables.
- Understanding Unicode and UTF-8 character encoding.
- Deploying a desktop or web app.
- Lab exercises

## **Course 2 - Lianja for Intermediate Developers. Duration 5 days.**

- Fast track Lianja/VFP scripting.
- Fast track JavaScript scripting for Web and Mobile Apps.
- An introduction to JavaScript for VFP developers.
- Using the Versions workspace.
- Visual development with standard sections, attributes and delegates.
- Understanding Single Page Applications (SPA).
- Using the Console workspace and the App Inspector.
- Best practices: Development, Staging and Runtime.
- Working with Virtual Tables to use MSSQL, MySQL, PostgreSQL and other databases.
- Understanding responsive UIs.
- UI presentation rules.
- Roles and Permissions.
- Understanding tenancies.
- A guide to Data Mapping.
- Working with custom libraries.
- Client-side and server-side data validation.
- Generating dynamic HTML5/J-avaScript content into Webviews.
- Working with dynamic content Dialogs and DialogPanels.

- Overview of PhoneGap for mobile developers.
- Developing and building native mobile Apps for iOS and Android.
- Using animations and gestures.
- Testing Web Apps using Web App View and Mobile App View
- Testing native mobile apps using the Mobile Live View
- Lab exercises.

### **Course 3 - Lianja for Advanced Developers. Duration 5 days.**

- Client/Server remote procedure calls in Web and Mobile Apps.
- Dynamic data exchange between web/mobile client apps and server-side procedures using Base64 encoded JSON objects.
- Working with custom actions.
- Building custom sections
- Building canvas sections
- Continuous Integration.
- Extending Lianja.
- Extending Lianja with C/C++ functions and classes.
- SQL Tuning and optimization.
- All about OData and the LianjaWebFramework.
- Building web services using rsp or jssp pages.
- Working with native JSON data using JQL.
- An introduction to jQuery.
- Working with the PhoneGap APIs.
- Developing native mobile PhoneGap Apps.
- Lab exercises.

### **Course 4 - Lianja Desktop App Development. Duration 5 days.**

- Quick overview, the anatomy of a Lianja desktop App.
- Quick overview, the anatomy of a page.
- Quick overview, the anatomy of a section.
- Quick overview, the Lianja Object Model (LOM).
- Understanding Single Page Applications (SPA).
- Quick overview, UI Navigation Techniques.
- Client-side and server-side data validation.
- Using the Console workspace and the App Inspector.
- App Center integration.
- Generating dynamic HTML5/J-avaScript content into Webviews using rsp or jssp pages.
- UI presentation rules.
- Roles and Permissions.
- A guide to Data Mapping.
- Using auto-suggestions.
- Using dynamic choice lists.
- Working with COM/ActiveX controls.

- Customizing the UI using CSS.
- Using the graphical debugger.
- Specialist debugging techniques for desktop apps.
- Understanding command line switches to customize the User Experience (UX).
- What is --networkshare and when to use it.
- Building desktop installers.
- Lab exercises.

### **Course 5 - Lianja Web App Development. Duration 5 days.**

- Quick overview, the anatomy of a Lianja Web App.
- Quick overview, the anatomy of a page.
- Quick overview, the anatomy of a section.
- Quick overview, the Lianja Object Model (LOM).
- Understanding Single Page Applications (SPA).
- Quick overview, UI Navigation Techniques.
- Client-side and server-side data validation.
- App Center integration.
- An introduction to JavaScript for VFP developers.
- An introduction to CSS.
- An introduction to jQuery.
- Client/Server remote procedure calls in Web and Mobile Apps.
- Agile web app development using the Web App View.
- Authenticated App access or guest App access. What's the difference?
- Using UI page animations and gestures.
- Working with custom actions.
- Working with custom libraries.
- Generating dynamic HTML5/J-avaScript content into Webviews using Lianja/VFP .rsp, JavaScript .jssp and Python .pysp server pages.
  - UI presentation rules.
  - User Roles and Permissions.
  - Working with dynamic content Dialogs and DialogPanels.
  - Binding photos to image gadgets: upload and update.
  - Handling editable embedded HTML content.
  - Testing and debugging Web Apps using the Web Inspector.
  - Specialist debugging techniques for Web Apps.
  - Lab exercises.

### **Course 6 - Lianja Mobile App Development. Duration 5 days.**

- Quick overview, the anatomy of a Lianja Mobile App.
- Quick overview, the anatomy of a page.
- Quick overview, the anatomy of a section.
- Quick overview, the Lianja Object Model (LOM).
- Understanding Single Page Applications (SPA).

- Quick overview, UI Navigation Techniques.
- Client-side and server-side data validation.
- An introduction to JavaScript for VFP developers.
- An introduction to CSS.
- An introduction to jQuery.
- Client/Server remote procedure calls in Web and Mobile Apps.
- Working in the PhoneGap workspace.
- Configuring a native PhoneGap App.
- Agile mobile app development using the mobile app view and the mobile live view.
- Authenticated access or guest access.
- Overview of PhoneGap for mobile developers.
- Developing and building native mobile Apps for iOS and Android.
- Using UI page animations and gestures.
- Working with custom actions.
- Working with custom libraries.
- Client-side and server-side data validation.
- Generating dynamic HTML5/J-avaScript content into Webviews.
- UI presentation rules.
- User Roles and Permissions.
- A guide to Data Mapping.
- Working with dynamic content Dialogs and DialogPanels.
- Building offline data collection forms.
- Server data synchronization of offline data.
- Building query only forms.
- Handling digital signatures in forms.
- Understanding and working with the PhoneGap APIs.
- Binding photos to image gadgets: upload and update.
- Handling editable embedded HTML content.
- Using native UI controls with no special coding.
- The essential differences between mobile phone apps and tablet apps.
- Responsive UI design using UI presentation rules and device orientation detection.
- Integrating third party UI components.
- Integrating non standard PhoneGap plugins.
- Developing native mobile PhoneGap Apps in the cloud using the Adobe PhoneGap Build service.
- Testing and debugging Android Apps live on your Android devices.
- Testing and debugging iOS apps live on your iOS devices.
- Specialist debugging techniques for Mobile Apps.
- Preparing your mobile Apps in release mode.
- Submitting apps to Google Play.
- Submitting apps to the Apple App Store.
- Lab exercises.