Atkloud LLC

A startup company aims to help small and medium companies to create business solutions without worrying about coding or infrastructure.

About Atkloud

Atkloud is based in Raleigh North Carolina. The company’s objective is to help small and medium companies create business solutions without worrying about coding or infrastructure. Companies have an opportunity to import their spreadsheets into an enterprise scalable solution and extend them to be integrated with ETLs, notifications, security and business intelligence tools for analytic purposes. Data flow, security and automation are provided to improve the efficiency of the day to day operations.

ZK x Atkloud

ZK is the framework used as the front end of the application. ZK Spreadsheet is a key component since it provides the data entry component through the application. ZK has allow us to code a significantly large enterprise web application in a very fast pace. A very typical example of how the product is used is when a customer has been using a number of Excel spreadsheets in different departments. The product allows the user to import the spreadsheet. The customer can then configure the spreadsheet as a template and connect a data source of his/her choice (such as a database). By default it will save the data in a NoSQL database. This way the user can still use the same spreadsheet he has been using but with the benefit of centralizing the data. Configuration wizards are provided to manage the data and templates accordingly so the user can perform actions such as searching, etc. Macros are integrated in the spreadsheet to allow customers to have customized business logic actions using the spreadsheet. Macros

“ZK has allow us to code a significantly large enterprise web application in a very fast pace.”
can be designed using the products ETL designer which allows for a number of steps already pre-defined to transform and move data from sink to sources. Finally the product offers integration with Business intelligence technologies so that the users can benefit from analyzing their data and making faster decisions. The product provides enterprise features such as security, tracing, logging, searching, etc. ZK was used both for the user interface experience through the entire application as well as for the spreadsheet interaction. ZK Spreadsheet is the key product that allowed us to make this possible.

**Architecture**

The application can be deployed in multiple environments. It was created with the cloud in mind so that users would not have to worry about the infrastructure. The application can also be deployed on premise if needed. The architecture is based on micro services using Spring Boot as the main enterprise platform. Multiple technologies such as Rabbit MQ, Redis, Hibernate, MongoDB, Postgres, Power BI and ZK are integrated to provide a fast, robust and scalable system.

**The Challenge**

The project is quite ambitious since it tries to provide companies with an all in one enterprise platform to manage their day to day operations. It provides data centric capabilities to manage files from different sources (dropbox, s3, etc...), manage datasources coming from different databases (oracle, postgres, mysql, etc...), notifications, ETL processing, logging, analytics, etc... One of the biggest challenges was to create all the user interfaces to complete the project since it had so many different screens. ZK was tremendous help to get it done. We had worked with other technologies such as angular, Spring MVC and others but ZK definitely reduces the development time and allows you to spend more time in the back end logic.
Why ZK

We had evaluated several other solutions such as a pure Angular approach, Spring MVC and others. We created an initial prototype with the different technologies. All of them have their own pros and cons but for our project we needed a framework that would require the least amount of time to get things done from a GUI perspective. The ZK Spreadsheet is a key component of our solution and so we decided to go with ZK. ZK proved to be less memory consuming.

As mentioned previously, we chose ZK because it is very easy to learn and it provides really cool features and styles. It is also responsive and adapts to different resolutions which worked really well for us. We also needed to have a mobile interface and ZK allowed us to use the same framework which makes it easier in regards of maintenance. The ZK Spreadsheet is a component that is the key to our solution.

The Best of ZK

Aside from being a complete GUI framework very easy to use I would also say that the support is quite effective. I have send couple of questions or requests over the last couple of years and I always got a positive response back in a fast manner.

The ZK Spreadsheet is a very unique component that can be embedded into a web application. The ZK team is doing a great job making enhancement during each version. One of the best areas of ZK is its documentation and smalltalks. It really helps you to start developing screens in no time. The API provided is user friendly and easy to use and that is why is easy to get up and going very quickly.

The Result

As mentioned earlier the product tries to help companies all the way from the time they need to manually entry data to the point of
analyzing the data. It provides automation, tracing, security and other enterprise aspects. ZK was chosen as the user interface and we think it was the right choice for us. It provides elegant screens and provides support for all browsers and devices.

About ZK

ZK is the leading enterprise Java Web framework with more than 1,500,000 downloads. ZK is deployed by a large number of Fortune Global 500 companies, including Barclays, Allianz, Swiss RE, Roche, Deutsche Bank, Sony, Sun Microsystems, and Toyota, providing them with the ability to rapidly create rich Ajax enterprise level applications.