



# Digitizing Fintech

*Vaadin + Liferay Portlet Showcase*

*Ryerson University – March 15 2017*

**CONNECTED PEOPLE &  
OBJECTS**

**COOPERATION & SUSTAINABLE  
DEVELOPMENT**

**DIGITAL ECONOMY &  
INNOVATION**



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[github.com/mkgorshkov](https://github.com/mkgorshkov)

## Download the VM

***Download it now if you haven't already (link on the slip). (~4.4 GB)***

***Estimations for the download time (let's hope for 100+)***

***10 Mbps 1hr***

***24 Mbps 26min***

***100 Mbps 7min***

***Vaadin Overview***

***Importing VM***

***Architecture of Our Solution***

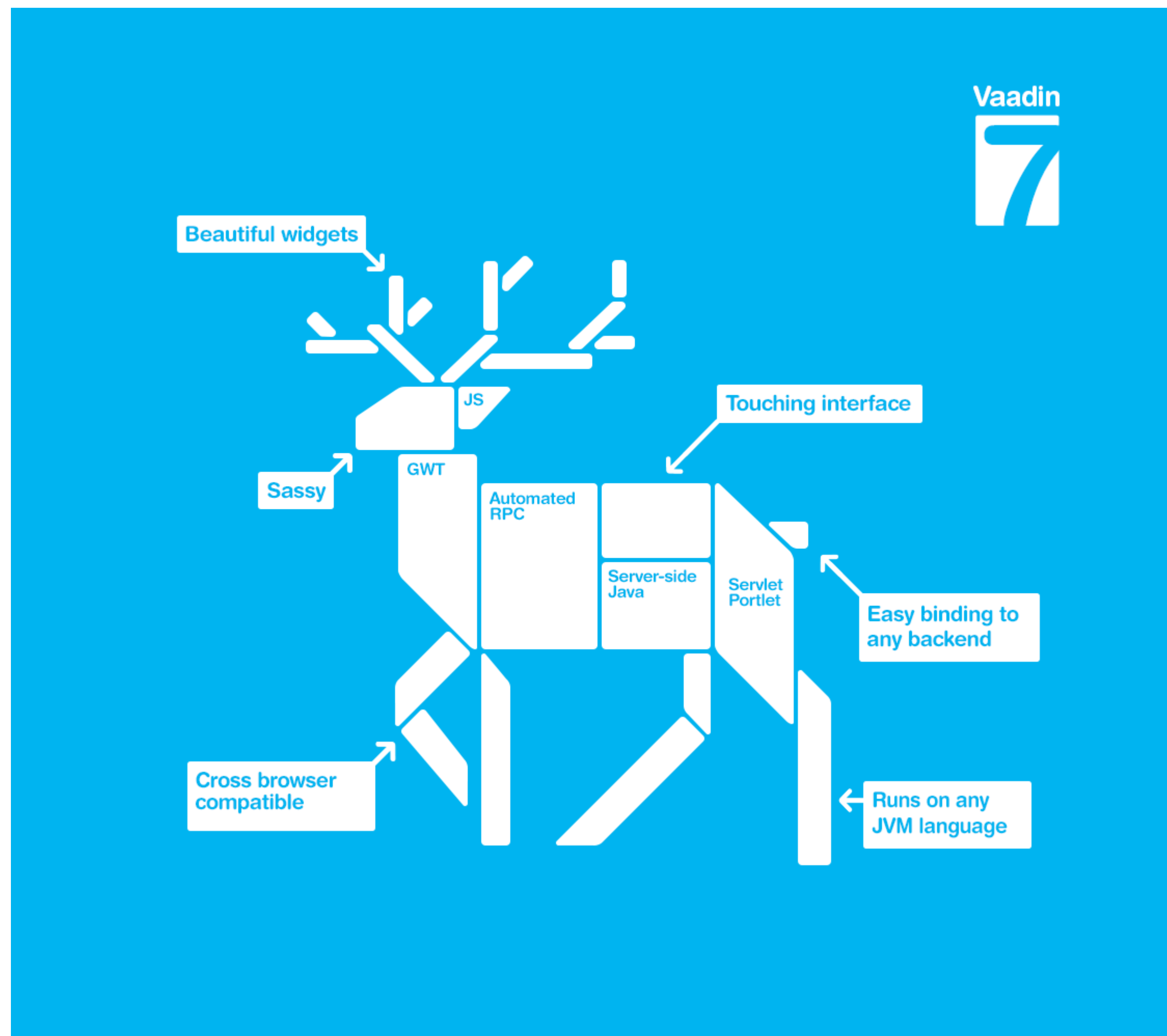
***Hands On Programming***

***Deploying on the Cloud***

***Homework/Contest***



# Vaadin Overview



## Benefits

*Open Source (Apache 2)*

*Written in Java (any JVM language works)*

*Extensible from Java or HTML ends*

*Large community with add-ons and extensions*

*Works well with Liferay (maven)*

## Who's Using Vaadin?

*150K Developers Worldwide*

*40% of Fortune-100 Companies (Puma, CGI)*

# Importing VM

## **Oracle VM VirtualBox**

1. *File > Import Appliance*
2. *Select the .ova file*
3. *Next / Import as necessary*
4. *Double click to start it up*
5. *It might be necessary to change some virtualization settings (Windows users – check the internet for your laptop model and what to change)*
5. *Password is ubuntu (on the slip)*
6. *Let's open up IntelliJ IDEA on the left menubar in preparation*





# Architecture of Our Solution

## **Master Server (with REST API)**

*Small REST API using Apache Jersey running on Tomcat 7 written in Java 8*

## **Liferay 6.2 CE (packaged with Tomcat 7)**

*The platform gives us a place for all of our content, the application server, and loads of APIs and abilities such as ACL.*

## **Vaadin Portlet (Insurance Portlet)**

*Written in Java 8, interacts with our REST API and with Liferay using the exposed APIs.*

## **Development tools and techniques used to build portlet :**

- Analysis of Requirements + Considerations about Domain
  - Fundamentals of OOP + Design
    - Maven
- Vaadin Designer for HTML/CSS Abstraction

*/rest/quote/add/*

# Let's Dive In

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1. Filling in the missing methods from here (as found on your VM):  
[https://github.com/mkgorshkov/Ryerson\\_Presentation\\_March15\\_Learning](https://github.com/mkgorshkov/Ryerson_Presentation_March15_Learning)  
So that it looks similar to the finished portlet here:  
[https://github.com/mkgorshkov/Ryerson\\_Presentation\\_March15](https://github.com/mkgorshkov/Ryerson_Presentation_March15).
2. Creating a new page in Liferay.
3. Compiling our project with Maven.
4. Transferring and deploying our files on the cloud.
5. Adding the new portlet to the page we created.



# Homework / Contest

## ***~ 24 hours to generate data***

*1. At 3pm tomorrow (Thursday March 16<sup>th</sup>) the data will be available in a CSV file:*

*[http://158.69.91.1:8080/ryerson\\_insurance\\_demo.csv](http://158.69.91.1:8080/ryerson_insurance_demo.csv)*

*2. Data will be available on the fly through a REST call, before then (format not guaranteed):*

*<http://158.69.91.1:8080/rest/datastore/getData/X-SECRET-RYERSON>*

*3. Take the data and expand your portlet or create a new portlet to do something with it? Suggestions: create a chart, some sort of visualizations to see certain trends? If you're not sure about Vaadin, look into the docs.*

*4. Send me a link to your github account by Monday March 20<sup>th</sup> 9am. The project which has the most creative and technical components will win a Savoir-Faire Linux shirt and an interview for our summer internship program!*



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