



# TJX Dev Fundamentals Prerequisites & Reference Materials

Hey! Everyone .

## The Mindset

In digital transformations, it's more important than ever to listen to what the customer wants, and to truly understand the need, not just the want.

The innovative technologies today are evolving so fast and it's nearly impossible for our stakeholders to express their needs in terms of the latest technology. We're in the position to truly understand the need, and recommend various ways to solve for it.

Here is another video that you can watch and possibly relate more to it. Have fun 😊

[https://www.youtube.com/watch?v=cDA3\\_5982h8](https://www.youtube.com/watch?v=cDA3_5982h8)

## The Change & It's consequences

The future is here, and as a business analyst you can either embrace it and transform people's lives or sit on the sidelines. Many of the digital capabilities of today, explore examples, and discuss how these innovations are changing customer experiences and the business analysis practices in organisations and the work you do.

Let's watch this interesting video. Enjoy!!

<https://www.youtube.com/watch?v=X6NJKWbM1xk>

<https://docs.google.com/spreadsheets/d/14ohx2tYAWsn2YYUCVThe9FwXn5LzvQfOTeyWZWS6Q5o/edit?usp=sharing>

## SDLC in 9 Minutes

### BUSINESS ANALYSTS IN SOFTWARE DEVELOPMENT LIFE CYCLE

Nowadays, it is much harder to find an organisation that does not use software solutions to run their business. The popularity of software solutions has led organisations to raise their expectations and require their software solutions to do much more in a shorter period of time. This is why it's inevitable that you need business analysts in the software development life cycle.



Watch this!

<https://www.youtube.com/watch?v=i-QyW8D3ei0&t=69s>

## JIRA Basics

### Plan stories and releases in Jira Software roadmaps

[https://www.youtube.com/watch?v=8nbJgvMf0hc&list=PLaD4FvsFdarR9RNlvUfee\\_iJ6WKRsrRjN4&index=5](https://www.youtube.com/watch?v=8nbJgvMf0hc&list=PLaD4FvsFdarR9RNlvUfee_iJ6WKRsrRjN4&index=5)

## Demo Den: Insights on the Board for Jira Software (Sep 2022)

[https://www.youtube.com/watch?v=HzxhnWI\\_V4Q&list=PLaD4FvsFdarR9RNlvUfee\\_iJ6WKRsrRjN4](https://www.youtube.com/watch?v=HzxhnWI_V4Q&list=PLaD4FvsFdarR9RNlvUfee_iJ6WKRsrRjN4)

## Additional Knowledge

What is MVP ?

## MVP as a great booster of software development effectiveness

Minimum viable product (MVP) is tasked with providing the first users with the bare functionality to see if the developed solution is able to fix the initial problems. It allows us to test the software product effectively and get feedback from users but with lower risks of failure, less expensive, and quicker. The MVP approach helps to see how the solution works on basic functionality to continue adding more functions to the future software product and be sure that each of them will work correctly.

### Tools used by a Business Analyst:

Though these responsibilities of a BA may seem tiring, there are multiple tools a BA can seek help from. They include:

- Activity workflows for manual processes
- User case dialogue for functional requirements
- Storyboard for screen flows
- Entity relationships to organize data
- Class/object for object-oriented implementations

## DevOps Fundamentals Prerequisite

<https://www.youtube.com/watch?v=kBV8gPVZNEE>

## Additional Watch after the END of the course

[https://www.youtube.com/watch?v=Z66-us\\_VDu8](https://www.youtube.com/watch?v=Z66-us_VDu8)

## Testing

<https://www.youtube.com/watch?v=baY3SalhfI0>

## Further Reading

### DFD:

<https://adventurous-lipstick-5dc.notion.site/DFD-62a3aae231d2428e984ec89866114b75>

[https://lucid.app/lucidchart/2e930eb5-c1eb-4a1d-99f8-68b1110db6f7/edit?invitationId=inv\\_bd809b29-0f4b-46bc-8a0b-9c6651818197&page=0\\_0#](https://lucid.app/lucidchart/2e930eb5-c1eb-4a1d-99f8-68b1110db6f7/edit?invitationId=inv_bd809b29-0f4b-46bc-8a0b-9c6651818197&page=0_0#)

<https://online.visual-paradigm.com/diagrams/templates/data-flow-diagram/>

### DevOPS

- *The Agile Admin* blog – <https://theagileadmin.com/>
- Signal Sciences – <https://www.signalsciences.com> | <https://labs.signalsciences.com>
- Verica – <https://verica.io>
- Six Nines – <https://sixninesit.com/>
- AlienVault – <https://alienvault.com> | <https://otx.alienvault.com/>

- *Crazy Fast Build Times or When 10 Seconds Starts to Make You Nervous* –

<https://www.infoq.com/presentations/Crazy-Fast-Build-Times-or-When-10-Seconds-Starts-to-Make-You-Nervous/>

- *Google Testing Blog* – <http://testing.googleblog.com>

- Wikipedia on continuous delivery – [https://en.wikipedia.org/wiki/Continuous\\_delivery](https://en.wikipedia.org/wiki/Continuous_delivery)
- “Dr. Deming's 14 Points for Management” – <https://deming.org/explore/fourteen-points/>

## DevSecOps

Some ideas on DevSecOps

Things to know about DevSecOps

### CI/CD

#### Further Reading

- *Continuous Delivery: Reliable Software Releases through Build, Test, and Deployment Automation* by Jez

**Humble and David Farley –**

<https://www.amazon.com/Continuous-Delivery-Deployment-Automation>

Addison-Wesley/dp/0321601912 | <https://continuousdelivery.com/>

**Difference between TDD, BDD, and ATDD –**

<http://www.assertselenium.com/atdd/difference-between-tdd-bdd-atdd/>

#### Definitions

- **Continuous integration (CI)** is the practice of automatically building and unit testing an entire application frequently, ideally on every source code check-in—dozens of times a day if necessary
- **Continuous delivery (CD)** is the additional practice of deploying every change to a production-like environment and performing automated integration and acceptance testing after it passes its build and unit tests
- **Continuous deployment** extends this concept to where every change goes through full automated testing and is deployed automatically to the production environment

#### Sample Application

word-cloud-generator app – <https://github.com/wickett/word-cloud-generator>

#### Version Control

Get started on GitHub – <https://github.com/>

Set up SSH key – <https://help.github.com/articles/adding-a-new-ssh-key-to-your-github-account/>

#### SCM Tools

- Git – <https://git-scm.com/>
- Mac Terminal command

brew install git

- Subversion – <https://subversion.apache.org/>
- GitHub – <https://github.com/>

- Bitbucket – <https://bitbucket.org/>
- Perforce – <https://www.perforce.com/>

### CI Server Tools

- Jenkins – <https://jenkins.io> | [https://hub.docker.com/\\_/jenkins/](https://hub.docker.com/_/jenkins/)  
<https://plugins.jenkins.io/> | <https://jenkins.io/doc/book/pipeline/>

- GoCD – <https://www.go.cd/>
- Bamboo – <https://www.atlassian.com/software/bamboo>

### CI Build Tools

- Make – <https://www.gnu.org/software/make/>
- Rake – <https://github.com/ruby/rake>
- Maven – <https://maven.apache.org/>
- Gulp – <http://gulpjs.com/>
- Packer – <https://www.packer.io/>
- FPM – <https://github.com/jordansissel/fpm/wiki>

### Testing Tools

- GoConvey – <https://github.com/smartystreets/goconvey>
- Chai (assert library) – <http://chaijs.com/api/assert/>
- Robot Framework –  
<http://robotframework.org/> | <https://github.com/robotframework/Selenium2Library>
- Gauntlt – <http://gauntlt.org/>
- Retire.js – <http://bekk.github.io/retire.js/>
- JUnit – <http://junit.org/junit4/>
- Go Vet – <https://pkg.go.dev/cmd/vet>
- Gofmt – <https://golang.org/cmd/gofmt/>
- RuboCop – <http://batsov.com/rubocop/>
- FindBugs – <http://findbugs.sourceforge.net/>
- Protractor – <http://www.protractortest.org/#/>
- Cucumber – <https://cucumber.io/>
- Selenium – <http://www.seleniumhq.org/> | [http://www.seleniumhq.org/docs/03\\_webdriver.jsp](http://www.seleniumhq.org/docs/03_webdriver.jsp)
- Sauce Labs – <https://saucelabs.com/>
- KitchenCI – <http://kitchen.ci/>
- ApacheBench – <https://httpd.apache.org/docs/2.4/programs/ab.html>
- JMeter – <http://jmeter.apache.org/>

- Mittn – <https://github.com/F-Secure/mittn>

### Further Reading


- Ansible – [www.ansible.com](http://www.ansible.com) | <https://www.redhat.com/en/topics/automation/learning-ansible-tutorial>

### Deploy Tools

- Chef – <https://www.chef.io/> | <https://learn.chef.io/#/>
- Puppet – <https://puppet.com/>
- Ansible – <http://www.ansible.com/>
- Rundeck – <http://rundeck.org/>
- UrbanCode – <https://www.urbancode.com/product/deploy/>
- Thoughtworks – <https://www.thoughtworks.com/continuous-delivery>
- Deployinator – <https://github.com/etsy/deployinator>

#### Azure App Service and Azure DevOps: Deploy any Web App with Minimum Configuration | Mitrais Blog

Microsoft Azure, commonly referred to as Azure, is a cloud computing service created by Microsoft for building, testing, deploying, and managing applications and services through Microsoft-managed data centre.

 <https://www.mitrais.com/news-updates/azure-app-service-and-azure-devops-deploy-any-web-app-with-minimum-configuration/>

