***Career growth/Development direction:***

* Improve communication and presentation skills
* Improve knowledge of back-end technologies
* Improve leader and management skills
* …

***Competency Enhancements Required***

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| **Goal** | **Developmental Activity** | **Outcome Desired** | **Term** |
| **Java Core** | Read “Thinking in java” by [Bruce Eckel](http://www.amazon.com/s/ref=dp_byline_sr_book_1?ie=UTF8&field-author=Bruce+Eckel&search-alias=books&text=Bruce+Eckel&sort=relevancerank). Doing exercises in the end of each chapter to have practice in topics. |  | **26 September** |
| Abstraction, Interfaces, Inheritance, Polymorphism, static and final keywords, assignment, math and logical operators | 1 checkpoint |
| Error Handling with Exceptions, Generics, Arrays, Collections | 2 checkpoint |
| Inner Classes, Enumerated Types, Annotations, Strings(Stringbuilder, StringFormatter) | 3 checkpoint |
| **Stripes, Spring** | Create light example of the project using Stripes, Spring. Sources: [http://www.stripesframework.org](http://www.stripesframework.org/), http://projects.spring.io/spring-framework/ |  | **24-31 October** |
| Servlets, ActionBean Lifecycle, configuration(in web.xml), Annotations, Exception Handling | 1 checkpoint |
| Spring: IOC, DI, spring context | 2 checkpoint |
| Spring: beans, factory, jpa | 3 checkpoint |
| **Hibernate** | Add to existing project hibernate. Make connection to the database. Practice work with session, writing queries etc.  Source:http://hibernate.org/ |  | **28 November** |
| Jdbc connection, configuration, persistent classes | 1 checkpoint |
| mapping, entity, query, transaction | 2 checkpoint |