

Cognizant Technology Solutions

# Coding Standards Trainer Guide

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## 1. For the Trainers

This document is a guide for trainers to help them deliver the coding standard session. This illustrates each slide and the content of the slides. Coding standards is very important for application development. Trainers should encourage the associates to develop all the core java/advance java activity using the coding standards explained as part of this session.

## 2. Slide Details:



This is what happens when we don't have a standard way of communicating. The human being not able to understand what the alien is talking about.



### Code conventions improve :

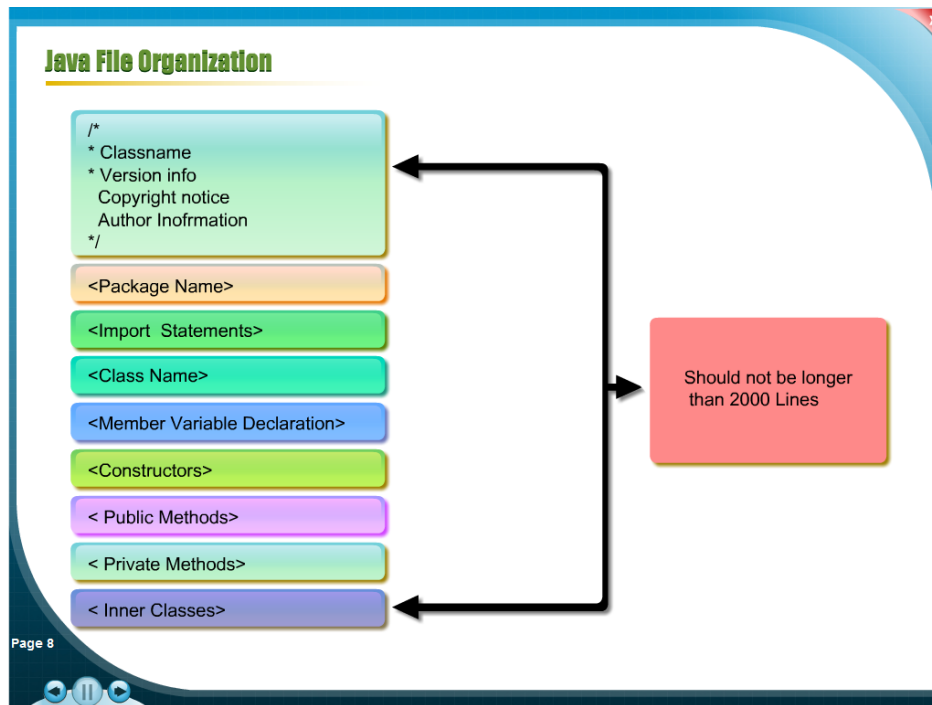
Readability of the software

Easy understanding

Easy maintenance.

In many software projects , the application will not be maintained by the developer of the application. It could be a person from a different team, vendor and also based out of different countries. So only if you follow some standards people will be able to easily understand and able to maintain it. For example English is a standard medium of communication across the world. A person who knows english can communicate with any person in the world, provided the receiver also knows english. Imagine if a oriya guy and Tamil guy who donno english are put in a room to discuss 😊 they cannot communicate anything. So english is identified as a standard language for different people in the world to communicate. Similarly coding standard is a standard / principles/ rules defined for software developers to develop application which can be understood and maintained easily by different developers irrespective of their organization the language they speak or geographies they live.

- **Reduce Maintenance cost** – In a typical software development we spend 80% of the software lifetime cost in maintaining the software. So lets say the cost of developing application and maintaining is 10 million dollars. Out of which 8 million dollars goes in to the maintenance of the project for couple of years. This cost attributes to understanding the existing code which is poorly developed, testing effort, enhancing the existing code which is not flexible for changes. These cost can be reduced if proper coding standards are followed.



Trainer should explain the java file structure on how the source elements like methods, variables, import statements needs to be ordered in a java file. The total number of lines should not exceed 2000 line again this number is something which varies from application to application defined by the customers.

The other slides in the deck are self explanatory and trainer needs to explain each slide to the CAT's.

### Coding Standards Game:

End of the coding standards sessions the trainers need to deliver a coding standard game where in trainees need to find the coding standard violation in five problems. The objective is that the CAT recaps the coding standard violations learnt as part of the session.

The game can be individually played (or) played as a team. The trainer can break the batch into five teams. Each team should be given a problem and the team which finds the maximum number of violation can be declared as winner. Duration for the entire game is 30 minutes 5 minutes per team.

**NOTE:** The game has hints and solutions. Anyone can download the game and look at the solutions before the game. So if needed trainers can ask the CAT's to play the session independently and brainstorm the coding standard violations in the batch.