Workshop Highlights

1. Learn Ruby concepts and meta programming.
2. Learn and version control tool- Git.
3. Test Driven Development (unit tests).
4. Understand software life cycle models (Waterfall, agile)
5. Practice Peer Review.
6. Learn good coding practices.

Syllabus

Day 1

- Introduction to Ruby - interpreted or compiled.
- Why Ruby?
- Read about popular applications developed in Ruby.
- Ruby Data types.
- Array, hashes, Range.
- Ruby programming constructs - conditions, iteration, function.
- Ruby IRB (interactive ruby shell)
- Assignment No 1

Day 2

- Ruby Classes, Objects.
- Access control.
- Modules and mixins.
- Introduction to Git.
- Git command - add, commit, pull, push.
- Assignment No 2

Day 3

- Ruby Block, Proc, Lambda.
- Exception Handling.
- Ruby Regex.
- Ruby Duck Typing
- Ruby Meta-programming (part 1)
    - eval
    - instance_eval
    - class_eval
    - send
- Rubocop (linting tool).
- Unit tests (rspecs).
- Git advanced (Pull request, rebase, stash)
- Assignment No 3

Day 4

- Ruby Meta programming (part 2)
    - define_method
    - undefine_method
    - method_missing
    - class.new
- File operations
- Ruby Gems.
- Build a gem.
- Code study of open source applications in ruby.
- Revise what we have learnt.