



WEEKLY PROGRESS REPORT (WPR-1)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Understanding the Problem Statement and starting practical implementation.

Achievements for the week:

For starters, we started to work on two problems, i.e. there will be implemented for two cops.

1. The problem encountered while checking for git files in the gems spec, manually.

Avoid using `git ls-files` to produce lists of files. Downstream (OS packagers) often need to build your package in an environment that does not have git (on purpose). Packages in Debian are built in a clean environment ([sbuild](#), [schroot](#), et al), and whilst doing so, the build fails with:

```
Invalid gems spec in [<gem_name>.gems spec]: No such file or directory - git
```

2. The problem encountered while using `require_relative`.

Avoid using `require_relative` with the relative path from your test code (spec/ or tests/) to lib/. Use `require` instead.

Using `require_relative` from the tests into the `lib` directory makes that impossible, but it also makes the test look less like a client-code that would use the code in your gem. Therefore, we recommend that the test code uses the main library code without `require_relative`.

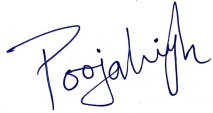
Therefore, when one uses a relative path, we end up getting a `LoadError`, stating:

```
cannot load such file - /[PKGBUILDDIR]/foo.
```

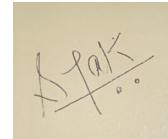
Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans:

Finding a workaround to the problem and implementing the solution.

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A handwritten signature in black ink, appearing to read "Upto".A handwritten signature in black ink, appearing to read "Syak".

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WEEKLY PROGRESS REPORT (WPR-2)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Understanding the Problem Statement. Doing Ruby basics, learning how to write a Gem; setting up a side-project for it.

Achievements for the week:

1. Checking for git files in the gemspec, manually.
2. Omitting the usage of require_relative, manually.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Studying what a linter is and how to go about writing a linter, including its best practices.

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WEEKLY PROGRESS REPORT (WPR-3)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Finding workarounds to discovered problems.

Achievements for the week:

1. Workaround to the git files

Avoid using git ls-files to produce lists of files. Downstreams (OS packagers) often need to build your package in an environment that does not have git (on purpose). Instead, use some pure Ruby alternatives, like Dir or Dir.glob.

2. Workaround to the require_relative files

Avoid using `require_relative` with the relative path from your test code (spec/ or tests/) to lib/. Use `require` instead.

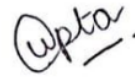
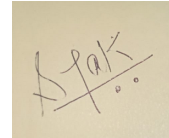
3. Learning how to make AST practically.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Experimenting around AST to find the perfect solution.

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A handwritten signature in black ink that reads "Uptar".A handwritten signature in black ink that reads "Spal".

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WEEKLY PROGRESS REPORT (WPR-4)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Practical implementation of cops for both the problem statements

Achievements for the week:

1. Initializing two cops under the parent directory structure of rubocop-packaging.
2. Constant testing for both the scenarios to collect all the possible errors.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: A drafting style guide for the gem and AST structure needs to be worked upon.

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WEEKLY PROGRESS REPORT (WPR-5)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Documenting the problem properly for better understanding.

Achievements for the week:

1. Both the problems are properly written keeping best practices in mind.
2. Drafting a style guide to mention all the workarounds and achievements.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Help fix the most common problem faced by upstream for patching out `git` from the gemspec file in a way that is acceptable by downstream as well.

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WEEKLY PROGRESS REPORT (WPR-6)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Started writing AST formation for each file.

Achievements for the week:

AST for both the cops is almost under process and might be finished by next week.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Finishing AST formation by next week.

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WEEKLY PROGRESS REPORT (WPR-7)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Completion of AST formation.

Achievements for the week:

The AST with regards to git files problems is complete now and is tested properly. For the proper training purposes, the linter was run across 100s of packages pertaining to the problem.

The `require_relative` was creating too many false-positives, and hence the AST needs to be tweaked for proper functioning.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: AST for `require_relative` needs to be finished

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WEEKLY PROGRESS REPORT (WPR- 8)

For this week

GROUP NO.	Name	Roll No	Branch	Section
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85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

AST for require_relative needs to be finished and the AST should go for testing.

Achievements for the week:

The AST with regards to require_relative problems is complete now and is tested properly. For the proper training purposes, the linter was run across 100s of packages pertaining to the problem.

Playing around with more scripts to make execution efficient.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Proper structuring of cops.

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WEEKLY PROGRESS REPORT (WPR-9)

For this week

GROUP NO.	Name	Roll No	Branch	Section
85	Samyak Jain	A2305217638	CSE	8Y
85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

COP require_hardcoding_lib_spec init.

Achievements for the week:

The AST with regards to require_hardcoding_lib_spec initiated. Playing around with more scripts to make execution efficient. Proper documentation of all problems.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Proper structuring of cops.

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WEEKLY PROGRESS REPORT (WPR- 10)

For this week

GROUP NO.	Name	Roll No	Branch	Section
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85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

AST for require_hardcoding_lib_spec under process.

Achievements for the week:

The AST with regards to require_hardcoding_lib_spec has many test scenarios for linter to be worked upon, hence testing all the cases and adding code iteratively.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Development of cops.

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WEEKLY PROGRESS REPORT (WPR- 11)

For this week

GROUP NO.	Name	Roll No	Branch	Section
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85	Utkarsh Gupta	A2305217557	CSE	8Y

Faculty Guide's Name: Dr. Pooja Singh

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

AST for require_hardcoding_lib_spec under process

Achievements for the week:

The AST with regards to require_hardcoding_lib_spec has many test scenarios for linter to be worked upon, hence testing all the cases and adding code iteratively.

Both integration of codes from team members is started. The cop is now in development.

Hardware and software requirements: Ruby, AST, Linting, CI

Future work plans: Development of cop successfully.

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