AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

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.

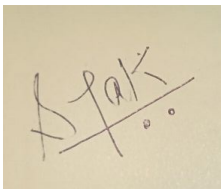
Achievements for the week:

- Learned the basics of Ruby, played around with the various methods of different classes.
- Also, learn more about Ruby gems, which are nothing but Ruby libraries. Created a dummy gem `foo`.
- To dive in more, did a side-project, where we wrote a Gem called `bat alert` which shows
  battery notifications in your favorite window manager, like i3, for instance.
- The Gem is officially published and can be fetched via `gem install batalert`.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

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.

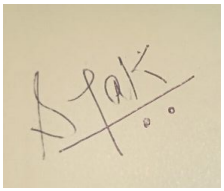
Achievements for the week:

- To dive in more, did a side-project, where we wrote a Gem called `bat alert` which shows
  battery notifications in your favorite window manager, like i3, for instance.
- The Gem is officially published and can be fetched via `gem install batalert`.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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

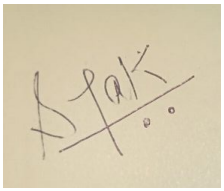
Achievements for the week:

- Understood what a linter is and how it works. Worked on an open-source project, coala, which is a linter for all languages written in Python. This gave me an understanding and its working.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.



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AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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

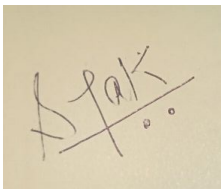
Achievements for the week:

- Learned more about Rubocop (and its "cops"), written in Ruby, and how it scans the entire source code to find common problems as per the best practices for writing good and clean code in Ruby.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.



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AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.

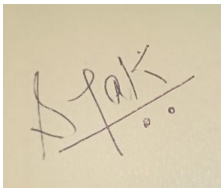
Achievements for the week:

- Having found what linters and how they work, the next thing to work on was setting up a linter on our own. This involves reporting problems to upstream that downstream faces in such a way that is acceptable to both.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
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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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.

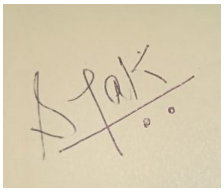
Achievements for the week:

- The best way out, hence found, is to extend Rubocop's functionality to the new linter as Rubocop already provides us with the infrastructure so re-writing it would be re-inventing the wheel. Therefore, the best way forward was to use a rubocop-extension-generator to set up an extension of Rubocop and use it from there within.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
UTTAR PRADESH

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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.

Achievements for the week:

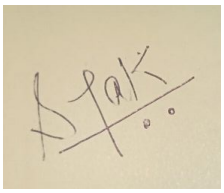
- The linter has now been set up as an extension of Rubocop using `ruboocop-extension-generator`, the next thing to do was to fix the most common problems faced by downstream during software packaging.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: There are more problems that downstream face like having the $LOAD_PATH set, etcetera. So the rest of the vacations would go on

developing the linter further and then releasing it as an open-source tool for everyone to use.



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AMITY UNIVERSITY
UTTAR PRADESH

WEEKLY PROGRESS REPORT (WPR- 8 & 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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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.

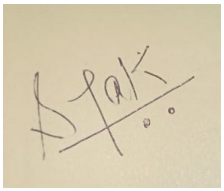
Achievements for the week:

- On having researched further about it, the most common problem was that the upstream was using `git ls-files` in their gemspec as a way of mentioning the files they ship when installed via `gem install foo`.
- This caused problems since this added an unnecessary dependency on `git` which would be totally bizarre. So the extension that I wrote basically checks if there is any usage of `git` in gemspec and suggests the upstream developer to avoid using it.
- There are plenty of alternatives for doing so in plain Ruby, namely:

1. Using Dir[“foo”, “bar”].
2. Using Dir.glob(“**/*”).
3. Using %w{‘foo/bar’}.
4. Using Rake::FileList.
5. Listing all the files explicitly.

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

Future work plans: There are more problems that downstream face like having the $LOAD_PATH set, etcetera. So the rest of the vacations would go on developing the linter further and then releasing it as an open-source tool for everyone to use.



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AMITY UNIVERSITY
UTTAR PRADESH

WEEKLY PROGRESS REPORT (WPR-10)

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: Ms. Shruti Gupta

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.

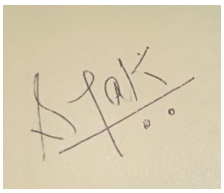
Achievements for the week:

- Learned the basics of Ruby, played around with the various methods of different classes.
- Also, learn more about Ruby gems, which are nothing but Ruby libraries. Created a dummy gem `foo`.
- To dive in more, did a side-project, where we wrote a Gem called `bat alert` which shows
  battery notifications in your favorite window manager, like i3, for instance.
- The Gem is officially published and can be fetched via `gem install batalert`.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
UTTAR PRADESH

WEEKLY PROGRESS REPORT (WPR-11)

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: Ms. Shruti Gupta

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.

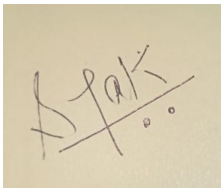
Achievements for the week:

- To dive in more, did a side-project, where we wrote a Gem called `bat alert` which shows
  battery notifications in your favorite window manager, like i3, for instance.
- The Gem is officially published and can be fetched via `gem install batalert`.

Hardware and software requirements:

Software: 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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AMITY UNIVERSITY
UTTAR PRADESH

WEEKLY PROGRESS REPORT (WPR-12)

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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

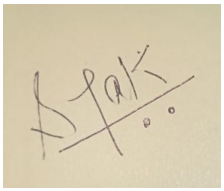
Achievements for the week:

- Understood what a linter is and how it works. Worked on an open-source project, coala, which is a linter for all languages written in Python. This gave me an understanding and its working.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.



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AMITY UNIVERSITY
UTTAR PRADESH

WEEKLY PROGRESS REPORT (WPR-13)

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: Ms. Shruti Gupta

Project Title: Linter for enforcing Downstream Checks

Targets set for the week:

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

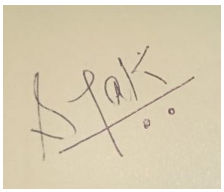
Achievements for the week:

- Learned more about Rubocop (and its "cops"), written in Ruby, and how it scans the entire source code to find common problems as per the best practices for writing good and clean code in Ruby.

Hardware and software requirements:

Software: Ruby, AST, Linting, CI

Future work plans: Working on setting up a linter to help patch things upstream so the downstream has relatively lesser work to do.



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