## <u>Team 105 – Project Plan</u>

We intend to develop a plagiarism detection application based on the below mentioned specifics:

Target programming language: Python

Frontend technologies we intend to work on: **Angular JS**Backend technologies we intend to work on: **MySQL, Java** 

## **Specifications of the Plagiarism Detection algorithm:**

We intend to implement the Clone Detection Algorithm using Abstract Syntax Trees (AST) to identify patterns between snippets of code and thereby detect the extent of plagiarism. The Clone Detection Algorithm includes Sequence Detection Algorithm and Generalization Algorithm which would prove to be instrumental in detecting plagiarism among pieces of code.

## **Project Plan:**

We intend to work on this project in three phases namely Requirements, Design and Implementation phases. These phases would involve one or two-week sprints, with each sprint having a specific milestone. We also intend to follow a test-driven approach, wherein we perform Unit Testing at every step of the Implementation phase.

Please find attached a spreadsheet of the same plan in the team repository. We have used a Gantt chart to represent our project plan populating the vertex42 template.

## **References:**

- Clone Detection using Abstract Syntax Trees I.D.Baxter, Andrew Yahin, Leonardo Moura, Marcelo Sant Anna, Lorraine Bier: <a href="http://leodemoura.github.io/files/ICSM98.pdf">http://leodemoura.github.io/files/ICSM98.pdf</a>
- Clone Detection Algorithm based on the Abstract Syntax Tree approach Flavius-Mihai Lazar, Ovidiu Banias: <a href="http://ieeexplore.ieee.org/document/6840038/">http://ieeexplore.ieee.org/document/6840038/</a>