

**VI Semester**  
**Project Work - UE17MC652**  
**Synopsis**

**Title:** Caption Generator

**Tools & Technology:**

- **Hardware Requirements**

Hardware	Specification
Processor	Intel(R) Core(TM) i7-6500U
Hard Disk	1 TB
Ram	8 GB
Keyboard & Mouse	Standard PS/2 Keyboard & ELAN I2C Filter Driver

- **Software Requirements**

Purpose	Tools & Technology
Frontend	HTML, CSS, Bootstrap
Backend	Flask 1.x
Language	Python 3.7
IDE	Jupyter Notebook, VS Code

**Abstract:** Caption Generator is a Machine Learning Application which identifies the action portrayed in the given image. The generated caption will describe about the image that will say what kind of actions is taking place in it. This project involves computer vision and natural language processing concepts to recognize the context of an image and describe them in a natural language like English. The objective of the project is to build a working model of Caption Generator by implementing CNN with LSTM.

**Submitted by:**

SRN	Name	Student signature with date
PES1201702013	Vijaykumar R Pai	

Internal Guide Name and Designation	Guide Signature with date
Dr. S Thenmozhi	

**WEEKLY REPORT**

<b>Week No:01</b>		
<div style="display: flex; justify-content: space-between;"><span><b>From: 20/01/2020</b></span><span><b>To: 25/01/2020</b></span></div>		
<p style="text-align: center;"><b>Details of Work done</b></p> <ol style="list-style-type: none"><li>1. Problem formulation</li> <li>2. Decided the title for the project</li> <li>3. Literature survey on the outline of methodologies to be used</li> <li>4. Decided the tools and technologies required for the project</li> <li>5. Decided the modules of the project.</li> <li>6. Thought about the application in the real world</li> <li>7. Prepared PPT for the title presentation</li></ol>		
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**WEEKLY REPORT**

<b>Week No:02</b>		
<div style="display: flex; justify-content: space-between;"><span><b>From: 27/01/2020</b></span><span><b>To: 01/02/2020</b></span></div>		
<p style="text-align: center;"><b>Details of Work done</b></p> <ol style="list-style-type: none"><li>1. Researched about CNN and LSTM.</li><li>2. Started learning about CNN and LSTM from tutorials.</li><li>3. Learned about the dependencies needed in the application.</li><li>4. Learned how to load images.</li></ol>		
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**WEEKLY REPORT**

<b>Week No:03</b>		
<div style="display: flex; justify-content: space-between;"><span><b>From: 03/01/2020</b></span><span><b>To: 08/02/2020</b></span></div>		
<p style="text-align: center;"><b>Details of Work done</b></p> <ol style="list-style-type: none"><li>1. Imported the image dataset and its respective corpus.</li><li>2. Configured the GPU memory for training purposes.</li><li>3. Imported the required libraries.</li><li>4. Plotted few images and their captions from the dataset.</li><li>5. Cleaned captions for further analysis.</li><li>6. Cleaned captions for further processing.</li></ol>		
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