



TRIBHUVAN UNIVERSITY (12, Bold, Center Justified)
INSTITUTE OF ENGINEERING
THAPATHALI CAMPUS

A Project Proposal (12, Bold, Center Justified)

On

[Project Title]

Submitted By: (12, Bold, Center Justified)

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Submitted To: (12, Bold, Center Justified)

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Kathmandu, Nepal

July, 2019 (12, Center Justified)

ACKNOWLEDGEMENT

Your acknowledgement here. Your acknowledgement here. Your acknowledgement here. Your acknowledgement here. **(1 – 5 paragraphs)**

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ABSTRACT

Your abstract here. Your abstract here. Your abstract here. Your abstract here. Your abstract here. Your abstract here. Your abstract here. Your abstract here. Your abstract here. (1 paragraph)

Keywords: [most frequently used words in your report (may be technology, algorithms etc.) (Italic)

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List of Abbreviations

AC	Alternating Current
ADC	Analog to Digital Converter
API	Application Programming Interface
BCM	Broadcom
CMOS	Complementary Metallic Oxide Semiconductor
CMS	Center Monitoring System
CSS	Cascading Style Sheets
DHCP	Dynamic Host Control Protocol
et al.	And Others
FTP	File Transfer Protocol
FTPS	File Transfer Protocol Secure
GIS	Geographic Information System
GPIO	General Purpose Input Output
GPRS	General Packet Radio Service
GPS	Global Positioning System
GPU	Graphics Processor Unit
GUI	Graphical User Interface
HDMI	High Definition Media Interface
HTTP	Hypertext Transfer Protocol
HTML	Hypertext Markup Language
IDLE	Integrated Development Environment
IP	Internet Protocol
IOT	Internet Of Things
ISP	Internet Service Provider
ISR	Interrupt Service Routine
IT	Information Technology

1. INTRODUCTION

Your introduction here. Your introduction here. Your introduction here. Your introduction here. Your introduction here. Your introduction here. Your introduction here. Your introduction here.

1.1 Background

Your introduction here. Your introduction here. Your introduction here. Your introduction here.

1.2 Motivation

Your introduction here. Your introduction here. Your introduction here. Your introduction here.

1.3 Problem Definition

Your introduction here. Your introduction here. Your introduction here. Your introduction here.

1.4 Objectives

The main objectives of our project are listed below (**maximum 2 points and to the point**):

- point 1
- point 2

1.5 Scope and Applications

Your introduction here. Your introduction here. Your introduction here. Your introduction here.

2. LITERATURE REVIEW

This chapter contains all the existing works that have already been carried out in the field related to your project topic. This chapters tells how much you researched before completing your project. You have to explain each of the works as a separate sub-topic with following details:

- **What is the work of existing/researched related topic?**
- **How it is done? used methods, techniques, technology, algorithms and any new innovations of existing/researched related topic)**
- **Its importance or applications existing/researched related topic**
- **drawbacks and limitations existing/researched related topic**
- **Criticize the work of existing/researched related topic**
- **Link these criticisms on the existing/researched related topic to the motivation explained in previous chapter.**
- **Each information should be properly sited.**

Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here [1].

2.1 Sub-heading 1

Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here [2].

2.2 Sub-heading 2 and so on

Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here. Your literature review here.
Your literature review here. Your literature review here [3].

3. METHODOLOGY

Explain the system block diagram along with the purpose of each block & how the blocks interact with each other. Explain any flowcharts / algorithms / methods that your project follows.

3.1 System Block Diagram/Architecture

(Explain all the building blocks of your system in details explaining what and how it does the things) Your system and architecture here. Your system and architecture here. Your system and architecture here. Your system and architecture here. Your system and architecture here.

Center Justified Figure

Figure 3-1: Block Diagram of abc

3.2 Description of Working Principle

Your system and architecture here. Your system and architecture here. Your system and architecture here. Your system and architecture here. Your system and architecture here.

3.3 Flowcharts/Algorithms (and other design methods)

Your flow chart here.

Figure 3-2: Flow chart

3.4 Instrumentation Tools

Explain hardware and/or software tools/requirements

4. EXPECTED OUTCOME

Explain the results and outcomes you expect after the project completion.

5. PROJECT SCHEDULE

Gantt chart

Table 5-1: Project Timeline

Center justified table

6. PROJECT BUDGET

Your budget (in tabular form)

Table 6-1 Project Budget

Center justified table

7. FEASIBILITY ANALYSIS

Describe how can it practically be used, its cost, its time, efficiency, its complexity etc.

References

(Use IEEE format as follows. Note: This is auto generated reference, do not try to type manually. Should be left justified.)

- [1] B. A., "Wireless Sensor Networks in Precision Agriculture," June 2005.

- [2] C. Ayday and S. Safak, "Application of Wireless Sensor Networks with GIS on the Soil Moisture Distribution Mapping," January 2009.

- [3] Circuitbasics.com, "Useful Raspberry Pi Commands," [Online]. Available: <http://www.circuitbasics.com/useful-raspberry-pi-commands/>. [Accessed Aug 2015].

- [4] Digi.com, "Documentation for XBee ZB (S2B) Modules," [Online]. Available: http://ftp1.digi.com/support/documentation/90000976_W.pdf. [Accessed Jun 2015].

- [5] P. Wood, "Raspberry Pi and Custard for Schools," [Online]. Available: <http://www.rs-online.com/designspark/electronics/blog/raspberry-pi-and-custard-for-schools>. [Accessed 02 Sept 2015].

- [6] B. Corporation, "Broadcom BCM2835 ARM Peripherals," Feb 2012. [Online]. Available: <http://www.farnell.com/datasheets/1521578.pdf>. [Accessed 2015 Jun 05].

- [7] Raspberrypi.org, "GPIO: RASPBERRY PI MODELS A AND B," [Online]. Available: <https://www.raspberrypi.org/documentation/usage/gpio/>. [Accessed Jun 2015].

- [8] J. E. K. B. a. S. K. Vongsagon Boonsawat, "XBee Wireless Sensor Networks for Temperature," 2010.

GUIDELINES

- Language must be English Language.
- You must use “**Times New Roman**” font with “**Bold**” and “*Italic*” variants whenever needs (except in exported image/diagrams, screenshot of tables etc.).
- For Cover page (First page of this document) and Title page (Second page of this document), use the font size and style as indicated in First page and Second page.
- From page number ‘i’ to end of the report, use proper headings and paragraph styles.
- For HEADING 1, use font size 12, style **BOLD**, UPPERCASE, Spacing (before: 0, after: 12, Line Spacing: 1.5).
- For HEADING 2, use font size 12, style **BOLD**, Spacing (before: 0, after: 10, Line Spacing: 1.5).
- For HEADING 3, use font size 12, style **BOLD**, Spacing (before: 0, after: 8, Line Spacing: 1.5).
- For HEADING 4, use font size 12, style **BOLD**, Spacing (before: 0, after: 6, Line Spacing: 1.5).
- For HEADING 5, use font size 12, style **BOLD**, Spacing (before: 0, after: 6, Line Spacing: 1.5) **and so on.**
- For Normal Paragraph, use font size 12, Spacing (before: 0, after: 18, Line Spacing: 1.5).
- You can use font size 11 or 12 for labeling the figure and table.
- All Headings must be Left Justified.
- All normal paragraphs must be left and right justified that is fully justified.
- All the tables and figures must be centered justified.
- Page size must be standard A4 size.
- Page margin must be 1.5” at left and all other of 1”.
- Page number must be 0.5” from the bottom and centered at the bottom of the page
- Prefatory pages (before INTRODUCTION) should be numbered in Arabic numbers (i, ii, iii...) and body part should be numbered in style (1, 2, 3...)
- You can start the numbering from title page but **must not number the cover page.**

- For extensive table of contents and list of figures, you can use 1 line spacing instead of 1.5 (**For extensive Table of contents and list of figures only, otherwise use 1.5 line spacing as normal paragraph**)
- All the figures, tables, charts, equations etc. used in the reports must be numbered using insert caption under reference of MS Word.
- Reference must be used in ascending order (It means if you use [1] reference in page 5 and reference [2] in page 6 then you must not use reference [3] in page 4) using IEEE format.
- Reference should not be numbered as chapter.
- **Length of the proposal should be between 10 to 15 pages**