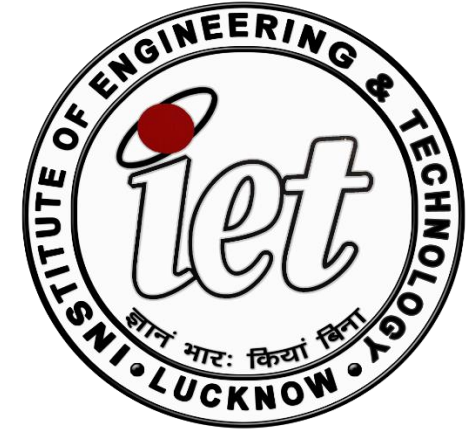


# Python Django Web Application URL Shortener



## Under the Supervision of:

Computer Science & Engineering Department

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# INTRODUCTION

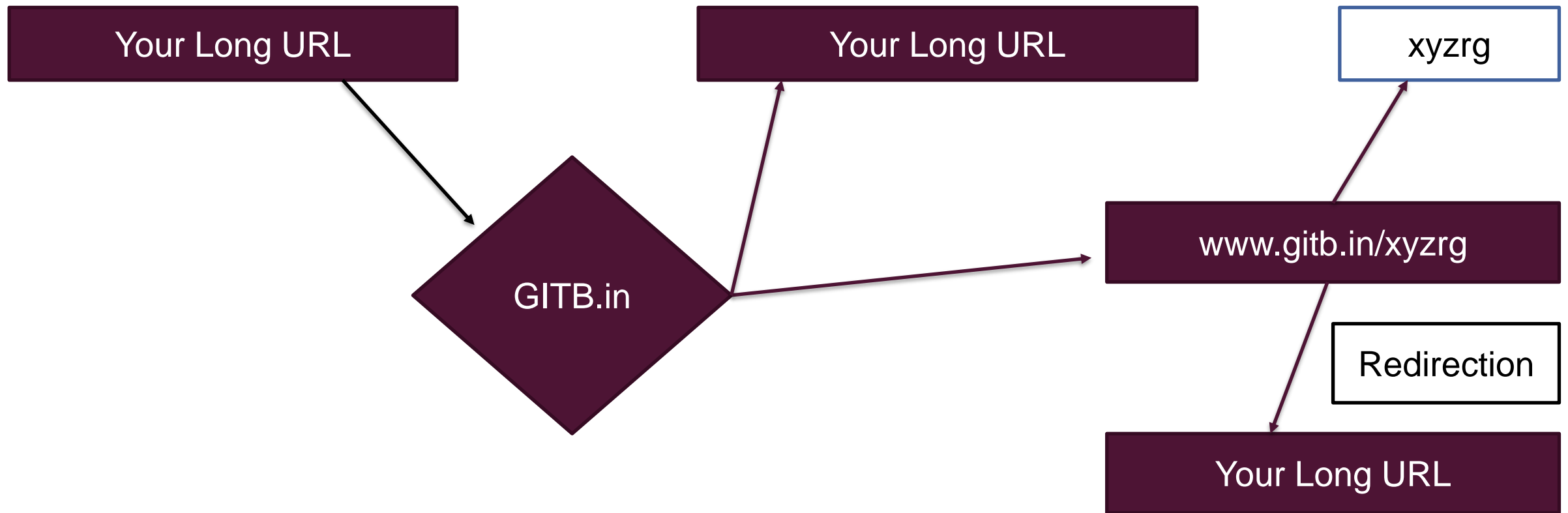
This report discusses the result of the work done in development of “**URL Shortener Application**” on Python-Django Platform. It is a responsive web application to provide you a short and easy to share Shortened URL for your long URL.

# PROBLEM STATEMENT

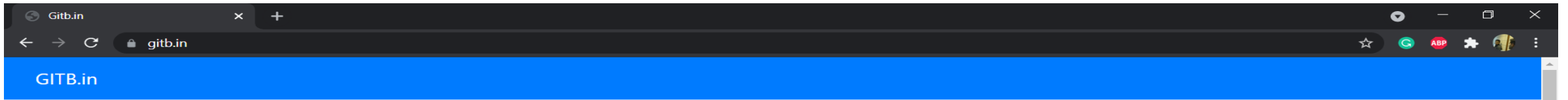
URL shortener can be found in a large variety of applications today like sharing YouTube links and any tweet from their apps they use their own shortener to short the link and provide you a short and easy URL to share. There is multiple URL shortener application giving premium services to use their shortened URL i.e. bit.ly etc.

So we decided to come up with the idea a shortener application using Python-Django which makes it faster and easy to share.


# FLOWCHART



# WEBSITE



## URL Shortener

Generate your Shortend link 

Enter your URL

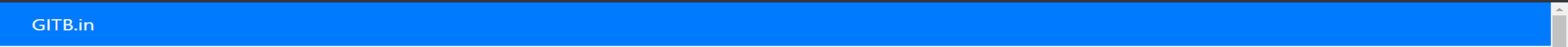
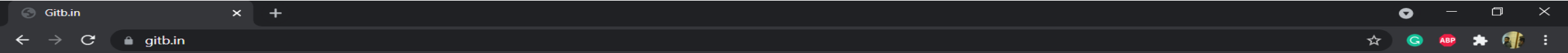
The link you are tired off.

Generate


### Simple and fast shortened URL !

GitBin allows to reduce long links from every sites on the Internet, just paste the long URL and click the Generate button. On the next screen,Click on Copy URL button to copy the shortened URL and share it on websites, chat and e-mail. After shortening the URL,It will redirect you to the original URL within a second.

### Who we are?



# URL Shortener

Your Shortend link 

http://gitb.in/xfzLfd

Copy URL

Previous URL: <https://www.ietlucknow.ac.in/>

## Simple and fast shortened URL !

GitBin allows to reduce long links from every sites on the Internet, just paste the long URL and click the Generate button. On the next screen,Click on Copy URL button to copy the shortened URL and share it on websites, chat and e-mail. After shortening the URL,It will redirect you to the original URL within a second.

## Who we are?



Gitb.in

New Tab

+

http://gitb.in/xfzLfd|

Apps

Inbox (16,352) - ma...

(50) C++ Tutorials I...

(145) Data Structur...

(543) Python Tutori...

(1458) Java Tutorial...

(1923) Data Structu...

(1923) Operating Sy...

(3335) YouTube

»

Reading list

Gmail

Images

⋮

# Google

Search Google or type a URL

Classes

Cloud Compu...

Competitive ...

Upstox Pro

GitHub

Fast.com

Google Drive

Welcome to I...



# RESULT OUTPUT

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So far, free vaccines were available for people above 45 years of age.  
From June 21st, free vaccines available for everyone above 18 years in government centres.  
Visit [cowin.gov.in](https://cowin.gov.in) to register and find vaccination centres near you!

Vaccination for ALL

ige/Re-evaluation Result of Odd Semester Examination (Session 2020-21)

Postpo

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Institute of Engineering and Technology, Lucknow (popularly known as the-"Engineering College" in Lucknow) is one of the premier and top ranked institute among all technical institutions associated/affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow. IET was established by the government of Uttar Pradesh in 1984 as a society governed Institute. The Institute is financed by Government of

**UPCOMING EVENTS**

- Webinar on Multi dimensional Horizons in Structural Engineering  
21st Aug 2021 - 21st Aug 2021

# DATABASE TABLE:

 id	original_url	shortend_url	keyword
40	<a href="https://play.google.com/store/app...">https://play.google.com/store/app...</a>	<a href="http://gitb.in/Kywkt5">http://gitb.in/Kywkt5</a>	Kywkt5
41	<a href="https://youtu.be/QHg7x5jPqS0">https://youtu.be/QHg7x5jPqS0</a>	<a href="http://gitb.in/nQqCO6">http://gitb.in/nQqCO6</a>	nQqCO6
42	<a href="https://www.india.com/uttar-prade...">https://www.india.com/uttar-prade...</a>	<a href="http://gitb.in/Oxw4jK">http://gitb.in/Oxw4jK</a>	Oxw4jK
43	<a href="https://taurenidushq.blogspot.co...">https://taurenidushq.blogspot.co...</a>	<a href="http://gitb.in/uLduWb">http://gitb.in/uLduWb</a>	uLduWb
44	<a href="https://www.sarkariresult.com/ups...">https://www.sarkariresult.com/ups...</a>	<a href="http://gitb.in/IBGmSG">http://gitb.in/IBGmSG</a>	IBGmSG
45	<a href="https://linkintime.co.in/MIPO/lpoal...">https://linkintime.co.in/MIPO/lpoal...</a>	<a href="http://gitb.in/tc2WFC">http://gitb.in/tc2WFC</a>	tc2WFC
46	<a href="https://www.sarkariresult.com/202...">https://www.sarkariresult.com/202...</a>	<a href="http://gitb.in/lq7Bmn">http://gitb.in/lq7Bmn</a>	lq7Bmn
47	<a href="https://www.ietlucknow.ac.in/">https://www.ietlucknow.ac.in/</a>	<a href="http://gitb.in/xfzLfd">http://gitb.in/xfzLfd</a>	xfzLfd

# HARDWARE REQUIREMENT

- Processor : intel Pentium(R) CPU 2020M 2.40Ghz
- Memory : 2.0GB or more
- System Type : 64bit operating system

(for localhost)

# SOFTWARE REQUIREMENT

- Python 3.6
- Browser for ex: Chrome, Mozilla etc.
- Any Installer i.e. pip , git etc.

# FRONTEND TECHNOLOGY

- User Interface
- The tool is very user friendly and intuitive and uses a GUI interface implemented using **HTML-CSS-BOOTSTRAP** for the Front-End and **Python to communicate with the user.**
- Various features are self – explanatory.
- **Forms are easy to fill in and components can be added** , removed and updated very easily through a single dialog box.
- The application includes **Copy Button** to make it easy to copy the shortened Link with a click.
- If you enter any un-valid URL so there will a **error with brief** description of the particular input field.

# BACKEND TECHNOLOGY

- Django
- OS-sys
- URL Validator
- Datetime
- Socket
- Random
- String

# FUTURE WORK & CHALLENGES

- We can provide the **Analytics of individual link** for the user.
- Many Applications are using **share options on their platform** to other social media platforms for the reach we can comply with them to short their long and messy URLs.
- We can **create extension** of our application for the browser so that easily we can short the links using.
- We can add **premium accounts** to customize their links as they want.
- As the domain names are being sold frequently in future there will be more longer URLs so we need a shortener to use them in sharing or mentioning anywhere.

# CONCLUSION

At last the project has great future in the real time as it saves a lot of space and reduces space complexity in the application like twitter etc. Purpose of creating our own link shorting project of ourselves which is free. The idea came from the link shorting Web applications like **bit.ly** and **tinyurl.com** which are providing shorting services with **Premium Prices**. So making our own website for the betterment of ourselves we came up with this idea using the currently most used language **Python**. So it's free website for link shorting from our side and anyone can use by clicking on <https://gitb.in/> as it is up and running.



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# Thank You



ANY QUERIES?