Project:

ADDING DOCUMENTATION, CREATING YOUTUBE VIDEOS AND INCREASING USER ENGAGEMENT OF SECURETEA PROJECT.

Mentors:

- Ade Yoseman Putra - (OWASP Securetea Project Leader)
- Rejah Rehim - (OWASP Securetea Project Leader)

ORGANISATION:

The OWASP Foundation.

Google Season Of Docs 2019 Proposal

About Me:

Username and Contact Information:

Name	**Sunny Dhoke**
Gender	**Male**
Time Zone	**IST(UTC + 5:30)**
GitHub ID	**https://github.com/sunn-e**
Medium Handle	**Sunny Dhoke**
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Education:

University	**Indian Institute Of Information Technology, Nagpur, M.H, India**
Degree	**B.Tech**
Field of Study	**Computer Science and Engineering**
Current year	**3rd year (Currently in my 6th Semester)**
Expected Graduation	**2020**

Personal Background:
Hello, My name is **Sunny Dhoke**. I am currently a third year undergraduate student at **Indian Institute Of Information Technology, Nagpur, India**. I'm pursuing a 4 year Bachelor of Technology (B.Tech) degree in Computer Science and Technology. I am

proficient in **C, C++, JAVA, Python and R** along with some basic knowledge of **assembly, web technologies** and **Linux bash**.
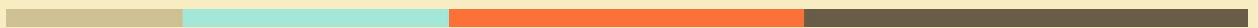
I primarily use an Acer Predator Helios 300 (**G3-571-77QK)** Tri booted (Windows 10 + Ubuntu 16.04 + Kali Linux 2019.1a) Notebook. My choice of text editor is **Atom**. I like to keep things clean and simple when it comes to coding.

I believe it's a good to share ideas and knowledge. We have created our world through collaboration and sharing. My belief is that softwares that help humanity should be open source. This enables all the people from around the globe to collaborate and create software that really matter.

As part of my **B.Tech**, I have taken courses such as **Algorithms, Data structures, Principles of Programming Languages, Computer system Architecture , Object-oriented Programming and Compilers.** I started taking interest in Python through an online course provided by **IBM**. Later on I read few books on Python. I keep on learning by doing projects and reading papers. I have taught basics of Python in my college's Hacking Club as a head.

As a person, I love reading technology and astronomy related articles and writing on Quora and Reddit. I absolutely love helping people with gadgets related queries. Also, I like to watch Sci-Fi movies Mr. Nobody being my favorite. I wish to travel the world someday. And hope my career will allow me for such luxuries.

How did I hear about this program ?

 I am an open source enthusiast from past few years .Time during seasons

I have no other commitments this season. So, I'll be able to give 40 hours or more per week. I am ready to commit extra time if needed in order to finish up the goals of the project. My season break starts from 5th September, so I can start working full time from that day on. I'll not be taking any vacations. My classes start on around August but I will be able to commit enough time for the project as there are no exams during the period.

What excites me about this project?

From past few months, I have been in contact with my mentors and the kind of support and guidance they provided is a huge reason for me to be part of this project and organization. The amount of exposure I got is invaluable. I have coded lots of software as part of my academics, but I wanted to build something that helps to reach out to global level.

I sincerely love the goal of this organization, to provide open and free security softwares. Being a security enthusiast all my life, this is the best opportunity I could get.

I really want to apply my skills and time to contribute to The OWASP Organization.

Why should I be selected for the project ?

I have been passionate about open-source software and being part of them. I can overcome my limits and find solutions that matter. I believe that to go far, one should be a good team player. I'm a team player and

believe into leadership qualities. I keep calm even under stressful situations.

I have been coding in python and doing documentation for other's projects from last 2 years. I'm confident that I have the required skill set to finish the proposed goals in time.

I will follow all the ethics that are required to implement the proposed goals in this GSoD proposal.

As per GitHub, I have been contributing to the OWASP-SecureTea software from more than 45 months as of writing this proposal.

About the Project:

Abstract:

The OWASP SecureTea Project is an application designed to help secure a person's laptop or computer / server with IoT(Internet of Things) and alert users with the help of various communication tools. This alert is sent whenever somebody tries to access the authorized user's device.

The software utilizes the input devices including but not limited to mouse, touchpad. This input devices help to detect an activity.

The OWASP SecureTea Project is developed in Python programming language. It has been tasted on variety of devices running Windows, Mac OS, Linux, etc. Mobile and IoT devices are being used for testing too.

The software has huge application in the real world. Many crucial features such Alerts, Log sharing and monitoring, Intrusion Detection System(IDS).,Intrusion Prevention System(IPS), anti-virus, firewall, web defacement detection and capability to add many communication medium are rigorously being implemented and tested. Some of the features are still in development. The motive of this project will be to

implement all of these features and make it even more suitable for security and IoT enthusiasts all over the world.

Benefit to the Community:

The OWASP Project is one of the famous open source Security Project. The SecureTea software is a crucial part of it. It is not just a collection of security tools but is also provides a variety of frameworks and books about other softwares by OWASP.

 The OWASP SecureTea utilizes practical approach to detect human intervention and security risks. It's wide application allows it to grow further. I want the roadmap to be followed rigorously and have more features included in default configuration. This software can become the swiss knife of security projects for a variety of devices. Also, I think the Data Science and IoT community can use it to derive other security solutions.

Contributions to SecureTea:

I am following the OWASP SecureTea Project from past few months and have seen a very friendly nature from the project mentors. This enabled me to contribute to the SecureTea software. The community is supportive ,too.

 Below are some of my initial Pull Requests

1. https://github.com/OWASP/SecureTea-Project/pull/54
2. https://github.com/OWASP/SecureTea-Project/pull/56
3. https://github.com/OWASP/SecureTea-Project/pull/58
4. https://github.com/OWASP/SecureTea-Project/pull/72
5. https://github.com/OWASP/SecureTea-Project/pull/73
6. https://github.com/OWASP/SecureTea-Project/pull/76
7. https://github.com/OWASP/SecureTea-Project/pull/82

And I'm still actively contributing towards the project.

Implementations:

Problem Statement: Adding new links and fixing the broken links within all of the documentation

Problem:

This issue I noticed was prominent on OWASP's official website and related pages and documentation.

For example, this issue #61 which I noticed https://github.com/OWASP/SecureTea-Project/issues/61

This issue September have lead to various users not being able to find relevant user guides.Affecting the popularity and user base of the project.

One more example which I think to be noticed is this link https://github.com/OWASP/SecureTea-Project/wiki

Clicking the above link leads to nothing whereas this is named as "Wiki Home Page" on official sites.

Solutions and Implementation:

These issues pop out because of ignorance or miscommunication between teams. My approach would be to

1. **find/check each and every link related to the project with help of GitHub and my mentors,for situations where I could not find any link at all like previous link in which I could not find a Wiki page.**
2. **Update the respective pages/links if they exist,at all.**
3. **Create pages that are yet to be made.**

This will contribute to the ease of access of the software project.

Problem Statement: Introducing a new YouTube channel

Problem:

Visit this official SecureTea page
https://www.owasp.org/index.php/OWASP_SecureTea_Project

Goto Project resources in right middle part of the page.

Click on "VideoDemo"
https://www.youtube.com/watch?v=Fsx3H5g_tPQ&list=PLIl-z1e_zb
EZFO-nTsOb2A2MnN2icCt_w

Here you will find a single youtube video with no sound. For a software
to be easily known among users, we need more interactive
content. There are barely 200 views on the above mentioned
video. Though only views do not matter,but community
interaction counts which is bare minimum. Having a great user
community helps the project to be known among cyber security
and academics community.

Solutions and Implementation:

1. **Create a new channel under OWASP umbrella organization**
    a. **Create another linked channel with "SecureTea Software" name(or any name that represents the software)**
    b. **Create two playlists**
        i. **For users**
        ii. **For developers**
    c. **Each Playlist will have videos on How-To guides, Examples and Tutorials, etc.**
2. **Create a separate YouTube channel altogether**
    a. **Same steps as of previous main bullet points, b and c.**

This can be done with the help of mentors and user feedback from community.The content and scripts can be made with little to no help. My reference would be these tutorials by IBM.

Ex1:

https://developer.ibm.com/videos/introduction-to-machine-learning-and-artificial-intelligence-watson-studio-tutorial-part-1/)

Ex2:

https://www.youtube.com/watch?v=MfH6T6J1_Jo

Video can be shot as separate process with help of any volunteer or we can use Open Source screen capturing tool such as https://getsharex.com/ . After that a voice over or simple subtitles can be attached with editing .Mentor then review it. If it is approved by Mentors,the video will be uploaded to the YouTube channel and shared on social media by OWASP foundation, for example- here's official OWASP organization's twitter account on which we can publish the links - https://twitter.com/owasp?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor.

We can have multiple communication channels to reach various users.

This will help to grow our user community and attract many contributors. And as they say, "If you want to go fast, go alone; if you want to go far go together". I firmly believe this project has the potential to go far.

Problem Statement: Creating Documentation

Problem:

Updating old documentation with new and updated versions.

I noticed that there are several documentations that are outdated or plain incomplete.

For example:

https://www.owasp.org/images/1/1e/OWASPSecuretea2017.pdf

This is a presentation on what the SecureTea is all about? Problem with this is that this is old and not updated with recent changes.

The .pdf file is incomplete and contains links that are deprecated.
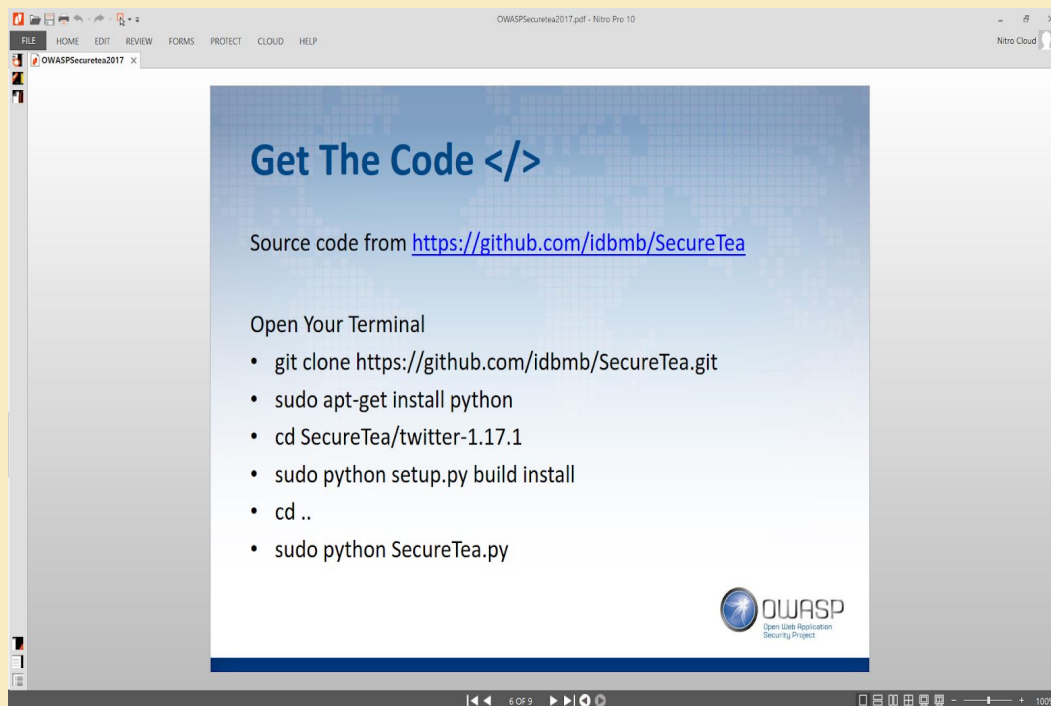
Solutions and Implementation:

1. Gather already known documentation.

    a. From GitHub

    b. The OWASP Foundation website

2. Update older documents with up to date changes..
3. Create the non-existent but necessary documents.
4. Embed all of this in a webpage.(optional)

This would help to document all of the code and act as guides. We can also publish this document on a blog so that user can easily go through documents without the need to download them and read(but the option to download them will still exist.)

This will help in testing the software on many environments and improve the quality of doc by testing and find various bugs to patch.

Documentation and Testing:

Documentation

The documentation part is what I will be focusing on mostly. Any new code that is introduced will have it's proper documentation done and reviewed.

 The documentation will consist of two parts:

1. Docstrings: In case of python Notebooks
2. Jupyter Notebooks: For the bugs that I fix or as part of Problem Statement 2 & 4.
3. Any other format as per mentors: This can be discussed with mentors since there are tons of great documentation options.

Testing

Testing will be done with the help of unit testing guides mentioned in project's GitHub repository. The problem statement 5 is completely dedicated for testing Securetea under various environments. Mentors will review and merge the Codes/Documents.

Timeline:

Timespan	Work To Do
November 30, 2019 at 18:00 UTC	Begins
August 1 - September 1, 2019	• Meeting with the mentors and other contributors about the nature of content to be produced.
Sept 2 - Sept 20	• Generate new web pages for SecureTea project in case of 404 No Page Found error is detected. • Update old documentations. • Create new user guide, developer guide, code of conduct, License, Software Specification Sheet for the community. .Setting up my laptop for video editing. • Installing OpenShot (https://www.openshot.org/) • Editing the raw files and creating various versions in different resolution for uses inside documentation, The OWASP Foundation and SecureTea's official websites.

Sept 20 - October 13	- Adding voices and additional information inside the video. - Adding The OWASP copyright information into videos. - Adding subtitle files on youtube with <u>English, Hindi and Marathi</u> scripts. - Taking feedback from mentors on final videos. - Get permission from the mentors and organisation to have the videos hosted on official YouTube channel of the OWASP foundation.
October 14 - October 25	- Generating a list of project related website links. - Check whether the webpage is up to date. - Fix the broken link with the help of mentor. (or by generating Pull Request on GitHub for GitHub hosted site.SecureTea is currently not hosted as GitHub pages.)
October 25 - November 14	- Creating a "How To" video about installing The OWASP-SecureTea in Ubuntu/Linux . - Creating a "How To" video about installing The OWASP- SecureTea in a Microsoft Windows machine. - Creating a "How To" video about installing The OWASP- SecureTea in a MacOS. - Reviewing the generated documents. - Verifying the generated documents from all the SecureTea contributors from various parts of the world. - Feedback of mentors on raw videos generated. - Generating .gif files with compression for web pages. - Fine tuning the videos for better visual appeal
November 15 -	Buffer Time Period

November 22	(DocFixes, Other issue solving and helping other GSoD students with Documentation of entire GSoD period.GSoD Time Ends.)

Note:

- Holidays were considered too while laying out this timeline.
- GSoD Events are underlined.
- Starting of Phases are bold.
- Milestones are Italic.
- I'm open to changes in my timeline as per directions of mentors.

After GSoD:

Contributing:

I will keep contributing to the OWASP SecureTea project as it is very close to my ambition of becoming a cyber security expert and it would be really amazing to see SecureTea grow as a mature software.

Blogging:

I have been active on Quora from last 4-5 years and have many followers who are specifically interested in such projects. Also, medium is quite popular. I will be publishing my weekly reports on Quora blogs as well as Medium. This will help my mentors on keeping track of my progress and having a streamlined GSoD journey of a GSoD student.

Clean up and optimizations:

This part is a continuous process and need not be separated from coding and documenting. Still I will do clean up and refactoring of code during buffer time I would have in week 11.

Software Packages to be used:

Languages:

Python

Atx - To generate GitHub documentation of SecureTea in *.md files format

HTML - To embed the documentation in SecureTea website.

LaTeX - For generating Latex files to convert them to *.pdf

Tools:

Pydev - For primary coding and debugging.

Anaconda - For running python scripts in a virtual environment

LibreOffice - For generating documentation files with *.odt/*.docx formats

ShareX - For screen capturing

Openshot -For Video Editing purpose.

YouTube Studio - Video editing.

GSoD:

Have you participated previously in GSoD? When? Under which project?

No. I have never participated in Google Season Of Docs before. This is my first time participating in it.

Commitments:

I will not be having any other commitments during the GSoD period. I will be able to put 6-8 hours on a daily basis for the last few weeks of the coding period. Also, I have made such a schedule that would enable me to have enough time to act as a buffer time.

Eligibility:

As per the rules of GSoD, I am eligible for Google Season Of Docs 2019. You can contact me at sunnydhoke22@gmail.com for any query,suggestions or any clarification. I will respond within minutes(IST) on Telegram https://t.me/sunn-e

Interaction with the The OWASP-SecureTea community :

From past few months, I have been active with the OWASP-SecureTea community at the time of writing this proposal. I am confident about the codebase of SecureTea. I have been in touch with my mentors on the communication channels(Telegram and Github). I am very thankful for the warm support given to me as a newbie to the project and community in the initial stages of my contribution. And special thanks for all the feedback and guidance I got from both the mentors.

Thanking Note to organisation :

I would like to thank every member of The OWASP Foundation, for giving me an opportunity to write this Google Season Of Docs proposal and providing the possibility of working with the organization.

I will look forward to every feedback from organization members reviewing this document. I would be delighted to discuss and change the proposal accordingly.

Thank You For Reading. Have a nice day.