# Project
**Denial of Service (DoS)**
**Team of 2 (max)**
**(50 points)**

## Introduction

The focus of this project is Distributed Denial of Service (DDoS) attacks.

Note: You can work on this project alone or with (ONLY) one other student in the same class.

## Getting Started

1.   Login to the Pitt Cyber Range (using the credentials sent to you by the instructor via a Canvas Inbox message) then navigate to the Kali21 machine.

2.   Browse http://11.11.0.41 using Kali's Firefox browser. You should see a page that looks:



## Problem Statement

You should take down the "Welcome to Initech" web page by performing a DDoS on the 11.11.0.41 server. In other words, make the "Welcome to Initech" web page unreachable such that the browser displays something **_like_** this:
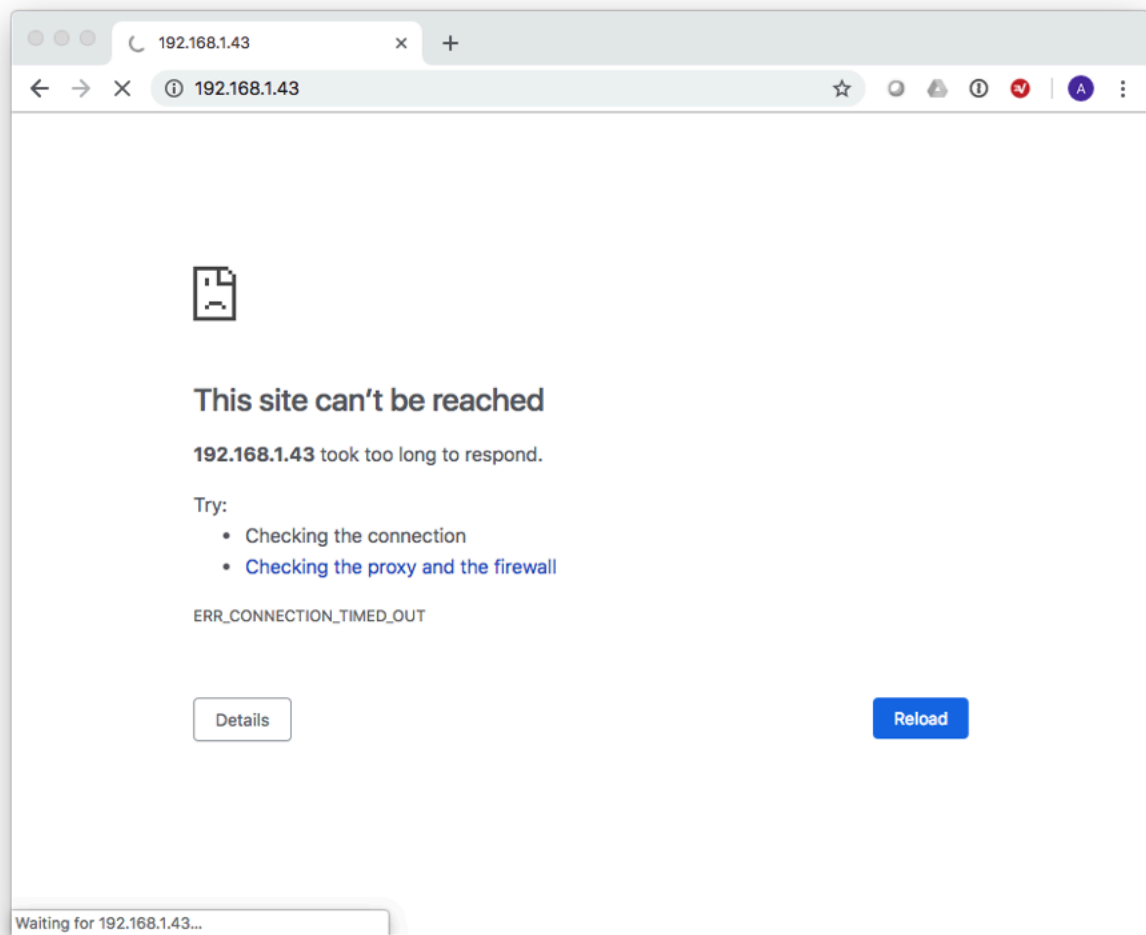
Any screenshot showing the inability to connect to the site would suffice.

Good luck!

**Why may the same attack not work on another site?**

The DDoS defense on the http://11.11.0.41 machine has been turned off. That is to ensure the success of your work. However, other machines hosting sites will most probably have OS defenses which can detect DoS and DDoS and have protections in place.

**What protection was turned off on the http://11.11.0.41 machine?**

The `net.ipv4.tcp_syncookies` kernel parameter in Ubuntu has been turned off using the following command:

```
sysctl -w net.ipv4.tcp_syncookies=0
```

**What software/method should I use in this project?**

Feel free to research software/methods which can perform a DoS attack and use any of them. Keep in mind that you may not get your first choice of software/method to work. Thus, expect to try multiple software/methods until you find one that works for you.

**The attack is working, but I get a page that looks different than the one in this document?**

That's fine. The purpose of this is to show that the browser cannot connect to 11.11.0.41 regardless of the actual look of the page showing the inability to connect!