# Crypto-Source

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# What is Crypto-Source?

Crypto-Source is a web based application that any user could go to and use to encrypt and decrypt messages.

Crypto-Source is implementing the RSA algorithm. The RSA algorithm is a public-private key cryptosystem that's still used today.

# Why did I do it?

Cryptography has always been a fascination of mine. I knew whatever my project would be, I wanted to do something with cryptography. I decided to make Crypto-Source specifically because I really enjoyed working in HTML and Python this semester. Also I decided to use the RSA algorithm because it's still a current and popular cipher and I also think it's pretty cool.

# How does it work?

Crypto-Source is mainly HTML and Python.

The user interface the client interacts with is an HTML web-page. The HTML page then passes the user input into the RSA algorithm in Python. Python then returns its output back to HTML to display to the user.

# Demo?

Demo!

# What works?

Flask is working exactly as it should.

HTML is also rendering exactly how it should

# What doesn't work yet?

While the HTML user interface works as it should, I had a lot of trouble getting HTML to pass input to Python so the encryption algorithm could work.

So unfortunately the webpage loads fine, but it won't encrypt anything

# Future Improvements?

I definitely need to get HTML and Python cooperating to get encryption working

Also getting the algorithm to read and write from a text file would be cool. This would make use faster for the client. That way the client could just upload a text file to encrypt/decrypt instead of typing in their browser