

Pedro Avila
CSc 492
Senior Project Outline
Advisor Dr. T.J. Kearns
2004.04.10

Subject: Design and implement an RSA cryptosystem to learn about the underlying mathematics of the RSA algorithm.

Object: To encrypt and decrypt plaintext files using the RSA algorithm. Designing and implementing java programs efficiently and effectively will give me a first-hand look at the problems faced by implementers of an algorithm whose power and beauty lies in its terrifying simplicity.

<u>Equipment:</u>	- PC running Windows XP.	na
<u>Materials:</u>	- <u>The Code Book</u>	\$14
	- <u>Números Inteiros e Criptografia RSA</u>	Borrowed
	- Various web sites	

Outline of Procedures:

Tasks to be completed before 2004.06.01:

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|---|----------|
| 1. Read, understand and take notes on selected material. | 50 hours |
| 2. Design system properties (equations to be used). | 25 hours |
| 3. Design flow of information. | 02 hours |
| 4. Design system interface. | 03 hours |
| 5. Design system tests. | 10 hours |
| 6. Code all necessary modules. | 10 hours |
| 7. Debug coded material. | 05 hours |
| 8. Quality and functionally test modules | 02 hours |
| 9. Design Digital Signature option (time permitting) | 03 hours |
| 10. Code Digital Signature option (time permitting) | 02 hours |
| 11. Debug recoded material | 02 hours |
| 12. Quality and functionally test modules | 02 hours |
| 13. Check Documentation of Code. | 02 hours |
| 14. Final Report outlining what was learned and functionality achieved. | 20 hours |
| 15. Design and implement project web site | 05 hours |

Total Time	<hr/> ~150 hours
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Student: _____

Date: _____

Advisor: _____

Date: _____