Objective

Pick one of the topics below and write a substantial research paper on it. The paper should reference at least 5 sources. Note, that our objective is not to write a survey paper, rather we want to dig deep into available sources and write an informative research paper.

Topics covered in class:

1) GUI facilities and Event handling model in Java
   a) Jlabel, JTextField, JPasswordField, JButton, JCheckBox, JRadioButton, JComboBox, JList, JTextArea, Jpanel, JSlider, JMenu, ...
   b) Layout Managers (Flow, Border, Grid, Box, Card, etc.)
   c) Mouse and Keyboard event handling
   d) Discussion of the Hyper-Man program

2) Multithreading
   a) The thread class
   b) Thread states and state transitions
   c) Inheriting the thread class vs. Implementing the runnable interface
   d) Thread Synchronization
   e) Discussion of the Pac-Man program

3) Networking
   a) Basic Networking Concepts
   b) Connection Oriented vs. Connection-less communication
   c) Discussion of the Server-Man program

Topics not covered in class:

4) Remote Method Invocation
5) Servlets

Basic structure of the paper:

Introduction
Body
Conclusion
Appendix A (refine and include your first paper)
   I) Introduction- History and Purpose of Java
   II) Compiled vs. Interpreted languages
   III) Structural differences in Java Applications, Java Applets
   IV) Syntax- Basic summary of what is new in Java
   V) Object Oriented Facilities
   VI) Exception Handling
Other Appendixes
Bibliography

Basic requirement of the paper:

1) Minimum of 15 pages + Appendixes and Bibliography
2) All quotes must be referenced
3) All sample code included in the paper and not written by you must be clearly referenced.
4) The paper must have a table of content (automatically generated by your word processor)
5) The paper must have a index (automatically generated by your word processor)