

# [Software engineering](https://assignbuster.com/software-engineering-essay-samples-2/)

CHAT APPLICATION PROJECT JAVA THREADS Introduction IEEE Computer Society through its SWEBOK 2004 defined software engineering as The application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software”; and 2. “ The study of approaches as in the application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software”. (SWEBOK, 2004 p. 1-1).   
Software engineering includes the following knowledge areas (KAs): 1. Software requirements, 2. Software design, 3. Software construction, 4. Software testing, 5. Software maintenance, 6. Software configuration and management, 7. Software engineering management, 8. Software engineering process, 9. Software engineering tools and methods, 10. Software quality, and 11. Knowledge areas of related disciplines (Computer Engineering, Computer Science, Management, Mathematics, Project Management, Quality Management, Software Ergonomics, and Systems Engineering) (SWEBOK, 2004 p. 1-2). Software engineers, therefore, must be proficient with the latter knowledge areas to handle every software engineering projects properly, successfully and efficiently.   
The software engineering project being studied at hand is the Chat Application. According to the given case, the status of which are the following: 1. The project is going well, and 2. The project is progressing.   
However, during one of the teams status meetings, two of the team members had an intense discussion on multi-threading particularly on the safety and ease of use of Java threading until everyone got somewhat confused. The team members asked you for clarifications on the issue.   
As a member of the team, you are given a task to clarify on the issue, and you are obliged to the following: 1. To prove that Java threading is a difficult task, and 2. To provide evidence to back up your belief.   
Further, you are required to do the following: 1. To locate one or more articles, web pages, or discussions dealing with Java threads, 2. Using one or more of your references for support, describe a significant problem or difficulty when using threads in Java, and 3. Provide either a concrete coding example or detailed scenario that illustrates why it is a problem.   
Articles, web pages, or discussions dealing with Java threads   
To answer the issue at hand on multi-threading particularly on the safety and ease of use of Java threading, the following articles with their respective links may be of great help:   
1. Lesson: Concurrency   
http://java. sun. com/docs/books/tutorial/essential/concurrency/   
2. Multithreading in Java   
www. devarticles. com/c/a/Java/Multithreading-in-Java   
3. Multithreading, In Java How to Program, 6/e   
http://www. deitel. com/articles/java\_tutorials/20051126/JavaMultithreading\_Tutorial\_Part1. html   
4. An Introduction to Java Thread Programming   
http://www. devx. com/java/article/16398   
Describing a significant problem or difficulty when using threads in Java   
Frankly, theres no significant problem or difficulty in using Java threads since this could clearly be addressed by the above mentioned articles, tutorials and web pages. Its only the side of technical expertise and know-how of the team members that will hinder or pose a significant problem or difficulty in using Java threads.   
A concrete coding example or detailed scenario that illustrates why it is a problem   
Since there are no significant problems or difficulties in using Java threads are evident, a concrete coding example or detailed scenario that illustrates why it is a problem is no longer necessary.   
WORKS CITED   
Abran, Alain and Moore, James W., eds. (2004). Guide to the Software Engineering Body of Knowledge(SWEBOK), Version 2004. Los Alamitos, California: IEEE Computer Society.   
An Introduction to Java Thread Programming   
http://www. devx. com/java/article/16398. April 23, 2007   
Deitel, Harvey M. and Paul J. (2005). Java: how to program (Electronically reproduced by permission of Pearson Education, Inc.). Upper Saddle River, New Jersey: Pearson Education, Inc.   
Lesson: Concurrency   
http://java. sun. com/docs/books/tutorial/essential/concurrency/. April 23, 2007   
Multithreading, In Java How to Program, 6/e   
http://www. deitel. com/articles/java\_tutorials/20051126/JavaMultithreading\_Tutorial\_Part1. htm. April 23, 2007.   
Multithreading in Java   
www. devarticles. com/c/a/Java/Multithreading-in-Java. April 23, 2007