

**CSE 4101**  
**Computer Science Projects**  
*Spring 2009 – Fall 2009*

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## **Problem Definition**

*Our mission is to develop an aviation scheduling system that is affordable, accessible, reliable, secure, and scalable.*

An aviation scheduling system is a tool that helps a flight department manage scheduled flights, aircraft, and employees.

Currently, the available aviation scheduling systems on the market are pricey, limited, featureless, and are fixated towards medium to large flight departments. Many of these systems are stand-alone applications that can only be accessed on one computer and in one physical location. Our objective is to develop an aviation scheduling system that is not only affordable and accessible, but reliable, secure, and scalable for years to come.

Confidentiality, integrity, and availability (C.I.A.) of the flight department's data must be guaranteed at all times. At any time a flight department must have the ability to decline service. Flight department data must be available to be backed up and printed at any time. Every user must have a unique identifier along with unique privileges throughout the system. The system must be available from any location with an Internet connection.

The system has to be scalable. Extensions to the basic system, such as Invoices and Quoting, must be able to be added with ease. Future technology has to be considered when designing the system. Emerging technologies, such as touch screens, can cause unseen complications.

The project is a business-critical system. However, it will focus solely on the software component of the system. The development team will have no control over the hardware components or human operators of the system.

To complete the development, the project has been allotted the Spring 2009 and Fall 2009 semesters.