

Many scheduling problems can be seen as activity sequencing problems, where the activity sequence in demand satisfies certain constraints. A typical example is scheduling in the airline industry where the task is to assign to each aircraft a segment of flight and nonflight activities while guaranteeing certain required properties. This diploma thesis deals with such type of constrained activity sequencing. The aim is to propose a formal model of the problem, including specification of all constraints and objectives, capable of finding (near)optimal sequences of activities. The proposed model is based on Constraint programming techniques.