# **Budget Justification**

#### **Salaries**

The project budget provides salary support for the principal investigator (two summer months) and three graduate research assistants (11 months) for each of the four years. The principal investigator will perform or supervise all major system design enhancements and empirical studies, manage and train the graduate student assistants, and supervise case studies.

### **Travel**

The project budget provides funds for four trips per year from Hawaii to the mainland. Two trips per year will be to attend meetings with the other principle investigators. The remaining trips will be to attend relevant conferences (e.g., ICSE, FSE, ISERN, or STAR), where he may report on the results of his own work and obtain first hand information on related work.

## **Computer Services**

The principal investigator directs the Collaborative Software Development Laboratory, which is currently equipped with one enterprise SUN server and 8 workstations, along with a printer and networking peripherals. The project budget provides funds of \$15,600 to purchase a new enterprise level server (Dell 2850 with RAID, backup and associated software and peripherals or equivalent) for Cedar in the first year of the grant. In addition, \$2,500 per year per developer is budgeted for "supplies", which include workstation purchases and upgrades, software, and associated peripherals.

#### Cost breakdown

All calculations are rounded to the nearest dollar.

**Summer Salary.** Summer salary is calculated as two additional months of the principal investigator's annual nine month salary. Summer salary includes the pay increases as negotiated through collective bargaining. Pay increases are as follows: 5% in 2006 (year 1), 9% in 2007 (year 2) and 11% in 2008 (year 3).

**Research Assistants.** This cost category provides support for three graduate research assistants for each of the four years. The salary for each research assistant is based upon RA-Step 3.

**Fringe benefits.** Fringe benefits for salaries are calculated at 3.5% for the principal investigator and 25% for the graduate assistants.

**Overhead.** University of Hawaii overhead cost is calculated as 36.3% of Modified Total Direct Costs (MTDC), i.e. salaries, travel, and supplies (equipment is excluded).