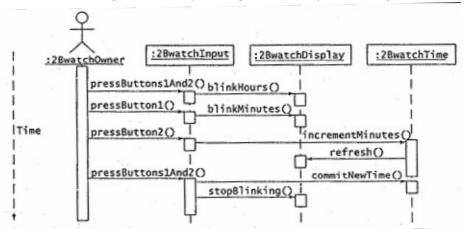
## Homework 3 (2007-09-21)

Submission deadline: 2007-09-27

Question 1: Draw class diagram corresponding to this sequence diagram



**Question 2:** Consider "Academic Payroll System for University" (Introduced in Question 4 of Homework 2) and based on example on page 206 of textbook, develop a requirement analysis document which includes:

- 1. Identified objects (entity, boundary, control) also describe the heuristics you use.
- 2. UML sequence diagrams for the problem.
- 3. UML class diagrams for the problem.
- 4. Inheritance hierarchy among entity objects.

**Question 3:** Draw state-chart describing the behavior of the <u>AnnounceTournamentControl object</u> based on the sequence diagrams of figure 5-26 through 5-28. (Bonus point 01)

\* Treat the sending and receiving of each notice as an event that triggers a change of state.

**Question 4:** Consider the problem description for "Advert Consultancy Inc" (Introduced in Question 5 of Homework 2) and based on example on page 206 of textbook, develop a <u>complete</u> requirement analysis document which should include:

- 1. Identified entity objects.
- 2. Identified boundary objects.
- 3. Identified control objects.
- 4. Map the use cases you developed in Homework 2 to identified objects with sequence diagrams.
- 5. UML class diagrams.
- 6. Inheritance relationships among objects identified in step 1-3.
- 7. State-chart diagrams for objects identified in step 1-3.
- \* This is an important question, as we will continue it for project as well. Do it carefully and completely.