Habitat -

The foresight to integrate the support and software tools from the beginning,
including bringing FastLink up, has been invaluable. Without this support we
would not have been able to keep any sort of schedule. The high-level tools
have been long levers. The rapport among the group has been very good and
ideas and programming from each person has been encouraged.

Early on in the project a lot of design work was done and legal delays on the
contract provided time to develop the design further. This planning time
worked out well and paid off as we decided exactly what we wanted to do.

Because of the concentration on the software design the creative content
suffered and the world was not ready. Since nothing like this had ever been
attempted before a lot of problems and details we didn't expect arose and
caused delays and scheduling problems.

The biggest problem is the distance we are from Quantum. Because of the
difference in time zones, corporate culture, and work habits the interfacing
is not as good as it could have been. The few face to face meetings that were
held were very helpful and went well. More frequent and intense contact would
have made things much easier and helped to avoid the various misunderstandings
which cropped up. Since Nancy has formalized the communication procedure
things are better. We should have scheduled more time to understand and
program the host computer since it turned out not to be a very clean system.

Planning & Pacing - In general, the more thought, the better prepared you will
be for unforeseen work. Since lots of crunch work is inevitable the schedule
should plan the crunches throughout rather than simply allowing them to
dominate at the end. What the designer doesn't know or anticipate effects the
schedule (usually for the worse) and although the design and implementation
are related they are not always clearly separable.

As much time as possible should be spent planning, and everything should be
planned in more detail, even if you take this principle inot account. The
underlying system needs to be built to be creatively flexible because things
are guaranteed to change later on when you have a clearer idea of what you are
doing. Because the creative and technical parts of the design are
interrelated, both need to be planned together. If this had been done better
with Habitat it would have resulted in a better time estimate. Instead we
tried to create a set of building blocks without a completely clear idea of
what we were going to build with them.

Every task which involved the Q-Link host computer was a problem because we
initially didn't understand their system, its system protocol or the assets
which we could use.

Conflicts -

Quantum did not think in the same way we did of systems for enabling users to
communicate with each other and so various conflicts in design came up that
had to be dealt with. It came down to whether we were doing a
telecommunications game using their existing ideas or creating a new one. Our
idea was to do more of a fantasy world separate from the rest of the user's
life and Quantum had difficulty understanding this. In particular, they have
never understood the principle of witholding capabilities from players for
dramatic or creative purposes -- they tend to want people to have access to
the maximum possible set of capabilities at all times, regardless of
situation.