

PilotStorm

Brainstorming Power in the Palm of Your
Hands

Group 19

14 March 2001

Faculty Advisor:

Uf Tureli

Group Members:

Lawrence Chen

Dan Cline

William Keung

Wai K. Lam

Alex Salazar

Ellie Tam

“We pledge that we have abided by the Steven’s Honor Code.”

I. Abstract:

Brainstorming is a common practice found in many disciplines. To support this collaborative activity we introduce PilotStorm, a collaborative brainstorming application using Personal Digital Assistant (PDA) devices, while taking advantage of the wireless networking potential. PilotStorm not only expands the current usage of PDA devices, but also nurtures the development of information sharing, distance learning, and technogenesis.

PilotStorm is a medium for users to share information with others. While PilotStorm is strictly an all-digital tool, it attempts to be as conducive to creativity and free thought as possible while supplying a basic structured environment upon which to develop, expand, and link ideas. PilotStorm is an innovative tool that combines technology, creativity, information sharing, and information management.

The following is a detailed report outlining the steps and hurdles taken in the past seven months to develop PilotStorm.

I-1. Acknowledgements:

There are a few people that we would like to thank for making PilotStorm possible.

We would first like to thank Mr. Jason Hong of the University of California at Berkeley. Mr. Hong and his team at Berkeley were the forerunners for PilotStorm. We would like to thank him for his support in the further development of PilotStorm.

Next, we would like to thank our faculty advisor, Dr. Uf Tureli and Dr. Stuart Tewksbury. Without their encouragement and skilled direction, PilotStorm would not be where it is today.

Last, but not least, we would like to thank Mr. Fred Bruno and Ms. Ling Li for their stern management to keep our team on time and persistently moving towards our goal.

Once again, we thank everyone for their support.

II. Project Status:

Team PilotStorm formed in September 2000 with the idea to develop an innovative tool that combines creativity, current technologies, and current communication techniques. After many brainstorming sessions, the idea of PilotStorm materialized. We devised a few guideline and knew what we were looking for, but it was not until we were knee deep in the design process that we discovered that there were flaws in our idea and design. Even then, not all problems could be foreseen.

This project was off to a slow start. The first couple of months were focused on researching technologies that none of us had experience in. Our pace eventually began to pick up, and as of December a working prototype of the PilotStorm application was complete. With the foundation solidified, a rigid structure of direction was needed. Therefore, our schedule needed to be re-developed, and a new task management structure was needed.

As of January 2001, the new task direction was instated (Refer to Figure 1: Gaant Chart, page 5). All design plans were finalized and were ready to be actualized. Programming of the server-side applications began. The PilotStorm application was being refined with some functions being re-defined, and embellishments added to others.

By early March 2001, the client side application was complete and possessed the ability to communicate with a generic test server. We are still working on the actual server that will be connected to the database to store all tags and information.

To date, we have hit few technical problems and design risks. Early on, there was a concern about memory management and allocation. The problem was resolved by limiting access to 4 users instigating an 8-tag limit, and rewriting some of the classes for allocating information. Ideally, users should have an unlimited number of tags, but the PDAs currently in the market do not support it.

All that remains is programming the server to control information streaming in from the multiple clients and to enable communication between the database and server.

III. Conclusion:

Based upon our revised strategy developed in December of 2000, we are making remarkable progress and proceeding as planned. We are slightly behind schedule on the server application, but we expect to have a functional prototype by early April.

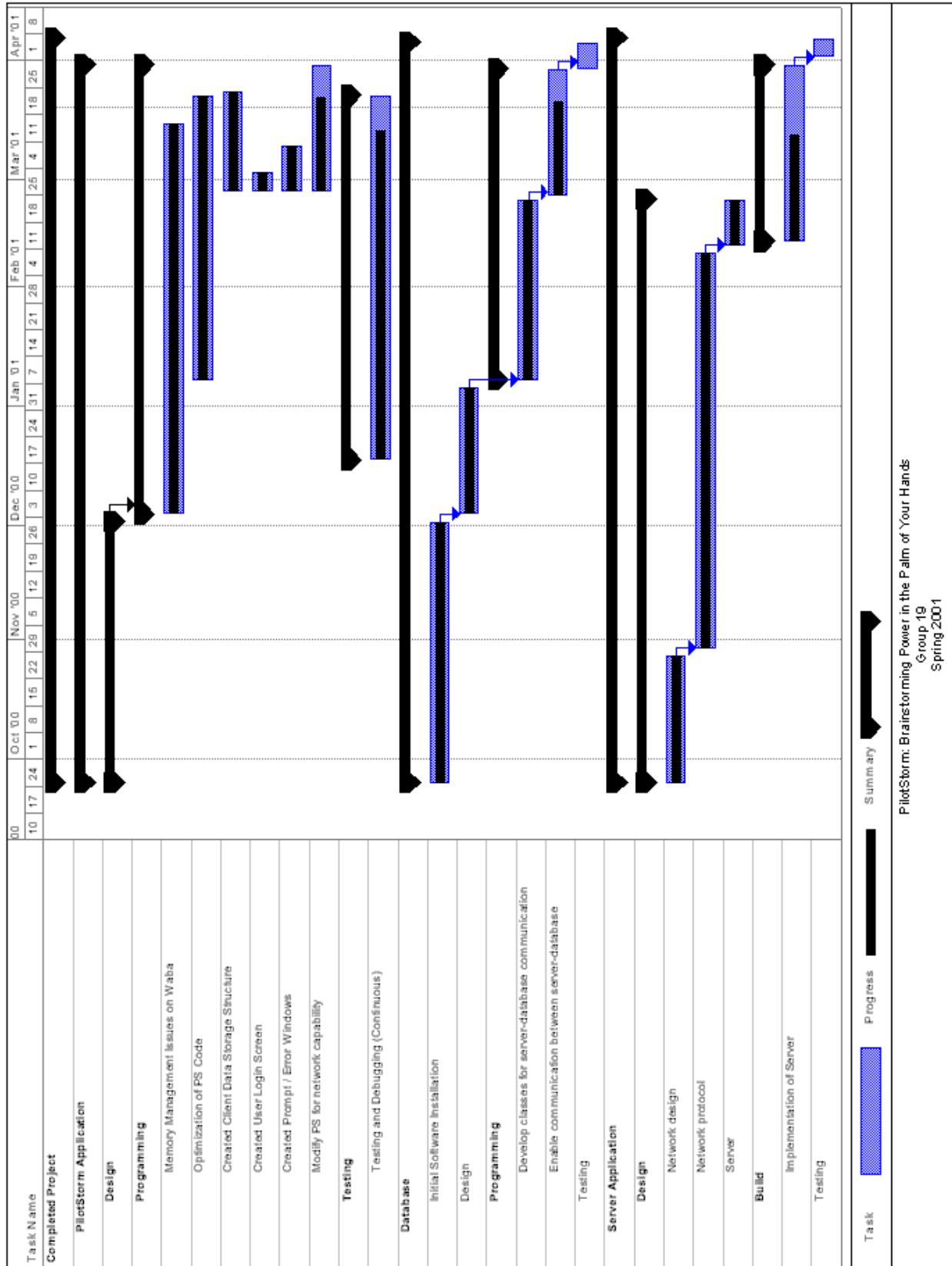


Figure 1: Gantt Chart