



Figure 9.11 Customer menu screen from the Wheels system with the option 'Add customer' selected

- The language used in instructions and messages to the user should be clear, concise and free of jargon. Error messages should state the cause of the error, if possible show how it can be rectified, and indicate where more help can be found. For example, if Annie enters £4000 as a deposit instead of £40, the message 'Invalid input' is a lot less helpful to her than 'You have not entered a valid amount. Deposits must be between £20 and £100. Select Help for more information'.
- There must be adequate user support with clear instructions, messages and comprehensive on-line help.

The user interface is an area where the users really do know best. They are the people who are going to use the system and it is essential that they are closely involved with the design of the interface. An interface that the users find attractive and easy to work with and that matches their view of the tasks in hand means not only a happier user but also fewer errors and a more efficient and effective performance.

Dealing with persistent data

Object-oriented and relational databases

Each time a program executes it receives, manipulates and outputs data. Almost all systems depend not only on data that is entered by the user, but on data that is stored and remains accessible during the life of the system. The Wheels system, for example, has to store