

Project Note

High End Sewing Computer with Internet Connection

With the latest generation of high-end sewing machines from Bernina, embroidery and sewing data can be taken conveniently from the Internet. Any need for additional software developers was able to be met in short order.

Task

The project involved the development by Fritz Gegauf AG (Bernina) of the new generation of the high-end sewing and embroidery computer Artista 200.

The project had the following characteristics:

- Use of absolute state of the art technology
- Platform change to Windows CE 3.0
- International cooperation with suppliers

Zühlke assumed responsibility for managing the sub-project software development, for handling the complete porting of the operating system Windows CE 3.0 on electronics built to customer specification, for providing support in the designing of the software architecture and for assisting with the implementation of the sewing, embroidering and Internet functionality.

Implementation

The activities in detail:

- Project planning: The software development plan was drawn up jointly with the team leaders and aligned with the other project teams.
- Project controlling: Weekly reporting down to the employee level allowed current project progress to be monitored at any time.
- Porting of Windows CE 3.0: Complete porting of the operating system (covers OAL, boot loader, standard drivers such as PCMCIA, LCD, Serial and the like) and the development and integration of customer-specified drivers. Coordinated with electronics development.



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- Development of the software architecture: Incorporation of all use cases in sewing and embroidering logic, development and implementation of the architecture together with the customer's domain specialists.
- Implementation of the sewing, embroidering and Internet functionality: The functionality of the sewing machine system was designed and implemented in close cooperation with the customer's developers.

Technical Data

FOperating system:
Windows CE

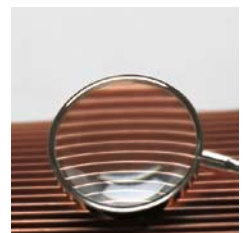
Development tools:
Platform Builder,
Embedded Visual C++,
Rational Rose 2000

Programming languages:
C++, C, Assembler
Developed according
to RUP and UML

CPU: SA1110 (Intel
StrongARM)

Customer benefits

- By bringing in external technology experts in Windows CE 3.0 and Internet access, the customer was able to concentrate on its core business.
- Any need for additional software developers was able to be met in short order.
- The regularly held coordination meetings provided a clear picture of the status of the work and the progress being made. Management received the information it needed to make project decisions.



Zühlke Engineering AG
Wiesenstrasse 10a
8952 Schlieren (Zurich)
Switzerland

Phone +41 44 733 6611
Fax +41 44 733 6612
info@zuehlke.com
www.zuehlke.com