

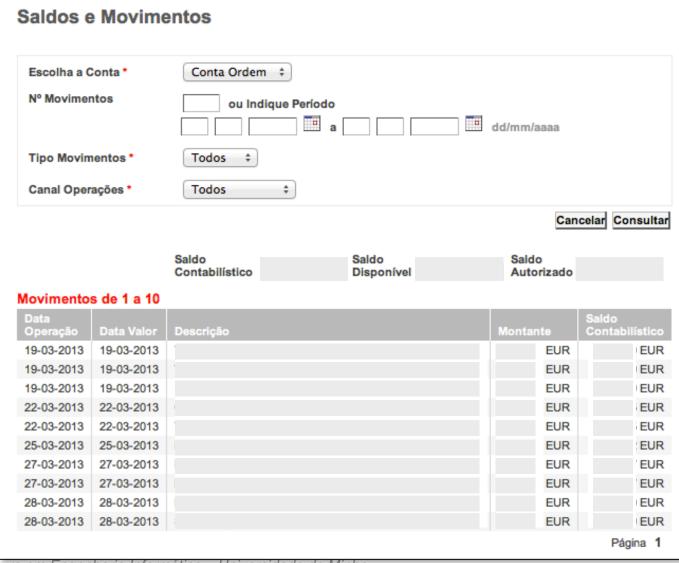




Primeira tentativa!

MPBBMPBBHKKHPBB

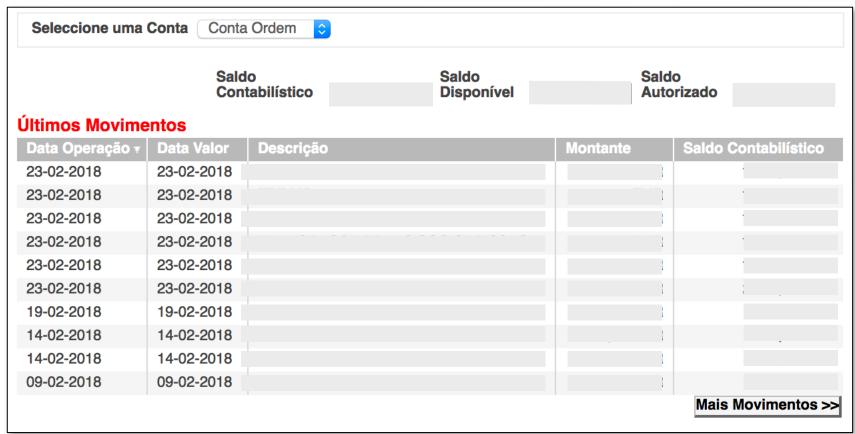




Facilitar
a utilização
mais
comum...

MPBB





Solução final...

(na altura)

Saldos e Movin	ientos	
Escolha a Conta *	Conta Ordem 💠	
Nº Movimentos	ou Indique Período	
Tipo Movimentos *	Todos ‡	
Canal Operações *	Todos ‡	

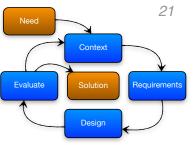
Licenciatura em Engenharia Informática – Universidade do Minho

Conta	•				it's n the it's use	ot what softwar what t	he to do.	
Saldos e Movimentos	s (EUR)			Contabilístico:	Cativo:	Dispor	ível:	Autorizado:
DATA OPERAÇÃO	DATA VALOR	TIPO	DESCRIÇÃO			DÉBITO	CRÉDITO	SALDO CONTROLO
2016-03-08	2016-03-08	LEV					-	
2016-03-07	2016-03-07	LEV					-	
2016-03-06	2016-03-06	TPA					-	
2016-03-05	2016-03-06	DEB					-	
2016-03-05	2016-03-06	DEB					-	
								+ Movimentos

Ainda mais simples! (+10, +10, ...)



HCD Key principles



- 1. The design is based upon an explicit understanding of users, tasks, and environments.
 - custom-made vs. generic or consumer products
 - appropriate allocation of function between users and technology
- 2. Users are involved throughout design and development.
 - valuable source of knowledge about the context of use, the tasks, and how users are likely to work with the future product or system
- 3. The design is driven and refined by user-centred evaluation.
 - feedback from users becomes a critical source of information
- 4. The process is iterative.
 - preliminary design solutions tested against "real world" scenarios, and the results fed back into progressively refined solutions
- 5. The design addresses the whole user experience.
 - bringing users into the design process to ensure a specific user experience
- 6. The design team includes multidisciplinary skills and perspectives.
 - teams do not have to be large but the team should be sufficiently diverse to make appropriate design trade-off decisions
 - Individual team members can cover a number of different skill areas and viewpoints

end-user; purchaser,
manager of user; application
domain specialist, business analyst;
systems analyst, systems engineer,
programmer; marketer, salesperson;
user interface designer, visual designer;
human factors and ergonomics expert,
human-computer interaction
specialist; technical author,
trainer and support

personnel.

E.g.

Understand and specify the context of use

- The context of use description should
 - specify the range of intended users, tasks and environments;
 - be derived from suitable sources;
 - be confirmed by the users or by those representing their interests in the process;
 - be made available to the design team to support design activities.



Specify the user and organisational requirements

- Complements specification of functional requirements
- The specification of user and organisational requirements should:
 - provide a clear statement of the human-centred
 design goals and their priorities

 Division of system tasks into those performed by humans and those
 - define the "allocation of function"
 - be confirmed by the users (or those representing their interests),
 - include any statutory or legislative requirements.



those performed by technology.

Conhecer os Utilizadores

- Quem são?
 - influencia objectivos de usabilidade e desenho.
- Provavelmente um grupo heterogéneo...
 - Não vale a pena definir o utilizador médio
 - Não vale a pena utilizar o mínimo múltiplo comum
 - Nunca nós próprios como modelo!
- Possíveis dimensões de análise:
 - Roles no negócio (Actores do UP?!), mas ainda...
 - Classes de utilizadores
 - Níveis de perícia
- Criar categorias facilita o trabalho



Classes de Utilizadores

- Sub-conjunto homogéneo de utilizadores, agrupados por:
 - Tipo de utilização do sistema
 - Características pessoais

Tipo de utilização – Quatro classes típicas

- Utilizadores directos
- Utilizadores indirectos
- Utilizadores remotos
- Utilizadores de suporte
- ou ainda,
 - obrigados a utilizar o sistema, ou podem escolher?
 - intermitentes ou continuados?





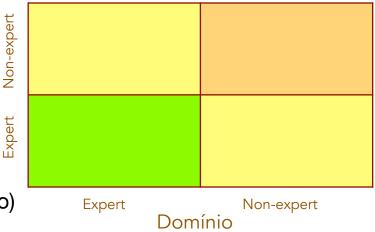
Classes de Utilizadores (cont.)

Características pessoais

- Capacidades cognitivas, de percepção, motoras, etc.
- Nível de formação
- Faixa etária
- etc.
- Influenciam tipo de interface, linguagem, etc.

Nível de perícia

- Influenciam o tipo de sistema, suporte e treino.
- Tipicamente
 - Inexperientes
 - Intermédios
 - Peritos
- Mas...
 - Mais que uma dimensão (tecnologia vs. domínio)
 - Quão perito é um perito? (especialização)



Tecnologia



Utilizadores Inexperientes vs. Peritos

Inexperientes	Peritos
Podem recear utilizar o sistema	Sentem-se mais confiantes na sua interacção com o sistema
Necessitam de feedback frequente	São capazes de procurar informação quando necessitam
Preferem ser 'guiados' na interacção	Preferem short-cuts e comandos abreviados Preferem interfaces que possam configurar
Têm de se sentir seguros que não vão 'estragar' o sistema	Gostam de sentir que detém o controlo da interacção



Perfis do utilizador - checklist

Informação sobre o Formação académica

utilizador Competências

Tipo de utilizador/Experiência

Utilização Opcional ou obrigatória
do sistema

Informação sobre trabalho

Classe de utilizador

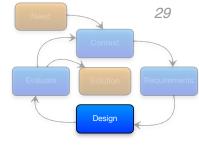
Descrição do trabalho

Tarefas principais

Responsabilidades



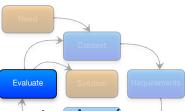
Produce design solutions



- Use existing knowledge to develop design proposals
 - user interface guidelines, similar products, standards, etc.
- Make the design solutions more concrete using prototypes (simulations, mock-ups, etc.)
 - more effective communication with users
 - reduced need and cost of reworking products later in the life cycle
- Alter the design in response to the user feedback and iterate this process until the human-centred design goals are met



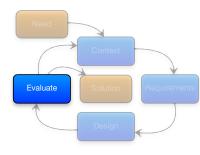
Evaluate designs



- Present the design solutions to users and allow them to perform tasks (or simulate tasks)
- Prototypes are not simply to show users a preview of the design, they are used to collect user feedback (comments, difficulties) and guide design:
 - select design options;
 - identify potential problems and need for improvements;
 - elicit further requirements from the users
- It is important to start evaluation as early as possible
 - The longer the process has progressed, the more expensive the introduction of changes is
- Expert vs. user-based evaluation



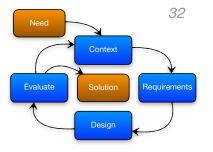
Evaluate designs



- An essential step in HCD, should take place at all stages in the system life cycle:
 - to guide design (!)
 - to assess whether objectives have been achieved
 - demonstrate that a design meets its goals;
 - assess conformity to standards
 - to monitor long-term use of the system (collecting user input over a period of time)
 - some effects are not recognisable until the system has been used for a period of time
 - there may be effects which result from external factors (e.g. unforeseen changes in working practices)



HCD advantages



- Making systems more usable can contribute to:
 - systems that are easier to understand and use, thus reducing training and support costs,
 - improved user satisfaction and reduced discomfort and stress,
 - improved productivity and operational efficiency of users and organisations, and
 - improved product quality and appeal to the users a competitive advantage



"If you think good design is expensive, you should look at the cost of bad design."

Dr. Ralf SpethCEO, Jaguar Land Rover

