

# Human-Computer Interaction Exercise



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## 03

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# Student Presentation

- Storyboard
- Paper prototype
- Discussion

(Sample solution by Christian Brinker and his group)

# Task

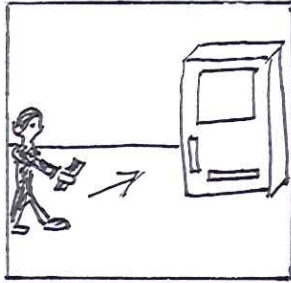
- Designing a ticket machine for local transport
  - Fahrkartenautomat für Nahverkehr



- Who are the Users?
  - Kids from 7-12 years
  - Traveling alone

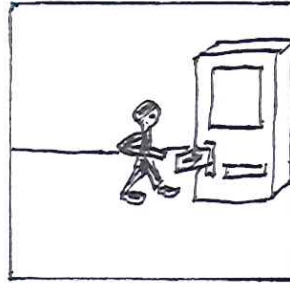


1.



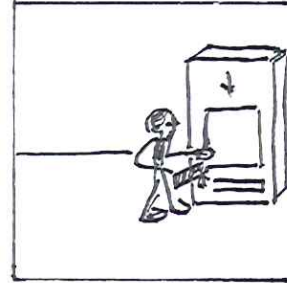
Kind kommt an

2.



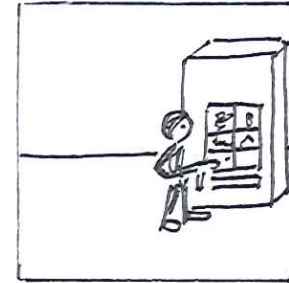
Kind wird identifiziert

3.



Automat passt sich an das Kind an

4.



Kind wählt Ziel aus

5.



Route wird angezeigt  
(evtl. mehrere Routen mit Auswahl)  
+ Bestätigung/  
Kauf

6.



Route wird angezeigt  
+ Druck  
(falls gewünscht)

7.



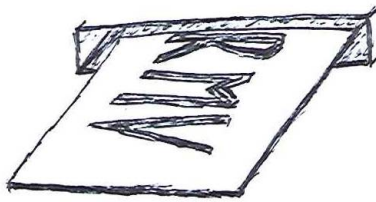
Beenden des Dialogs  
+ Automat geht in Ausgangszustand

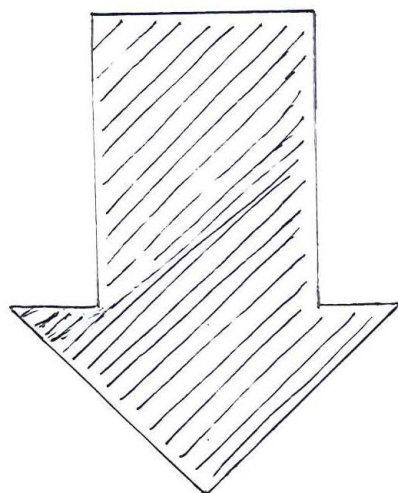
# Paper Prototype



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# Screen





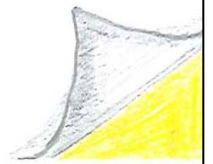
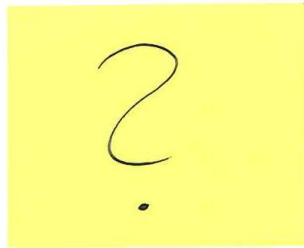
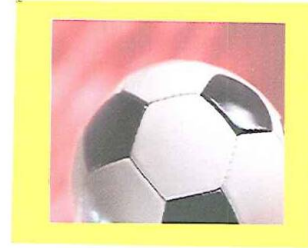
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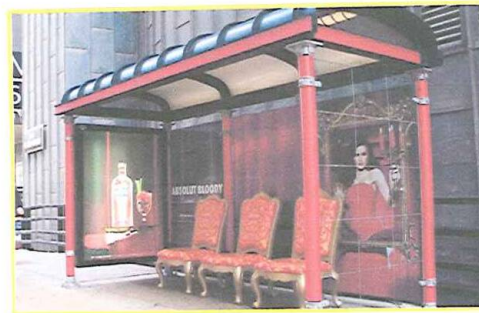
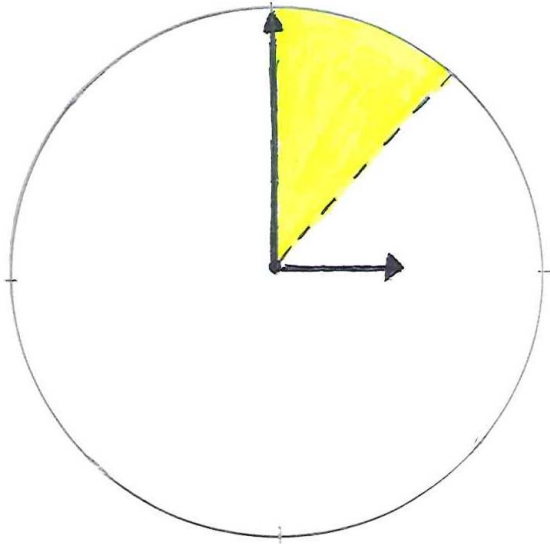
# 1st Design Alternative

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# 2nd Design Alternative

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Schule

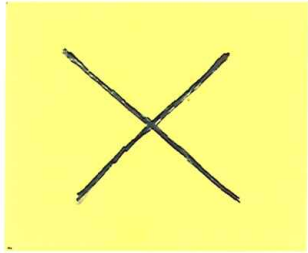
Fußball/  
Stadion

Oma

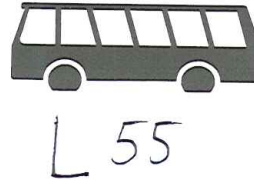
Peter

Sonderziel

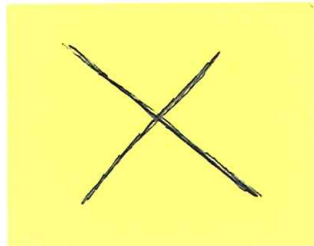
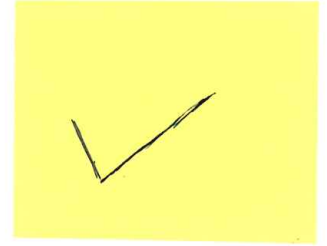
?



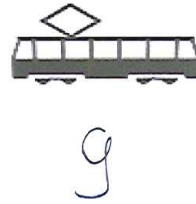
0:10



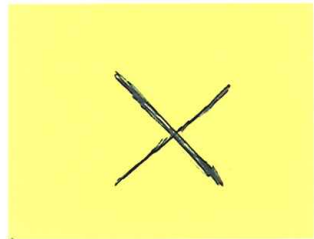
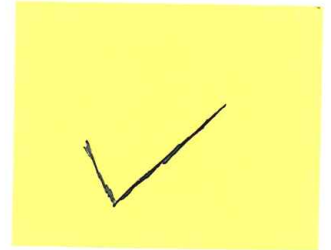
Platz  
1



0:12



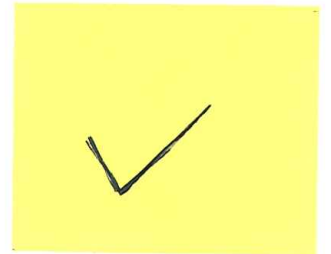
Platz  
5



0:25



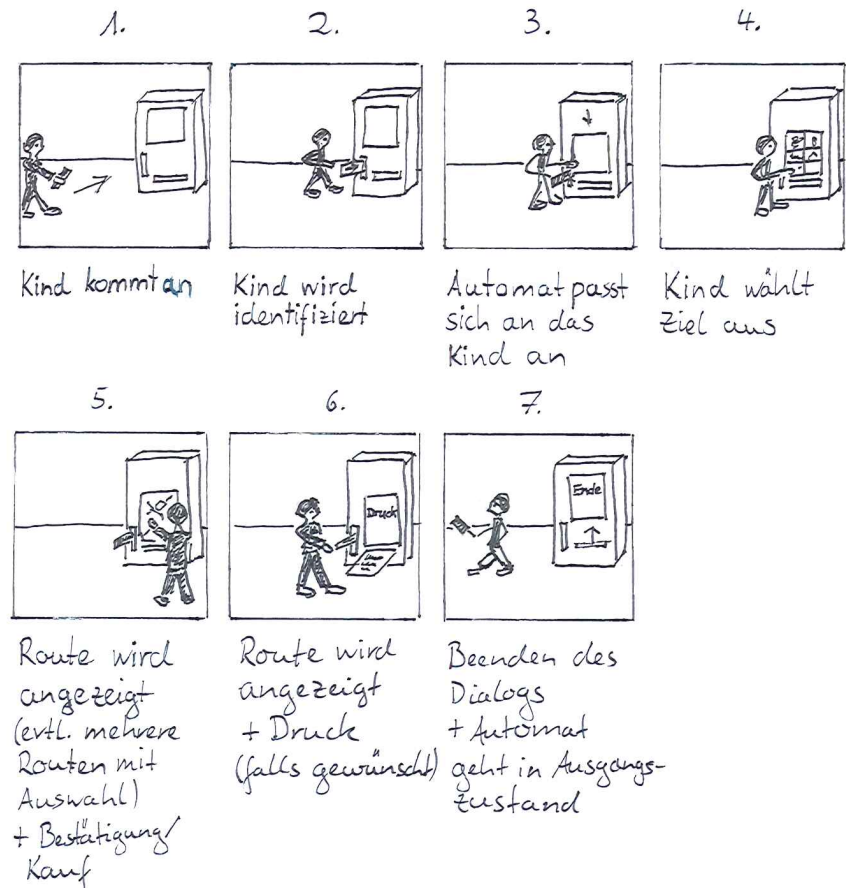
Platz  
2



# Storyboard Discussion



- Kids can forget to remove their ID card
  - Not to insert but to hold in front of a specific area (like Mensa Card)
- Height adaption problem
  - Can be done before card authentication by recognizing the person's height



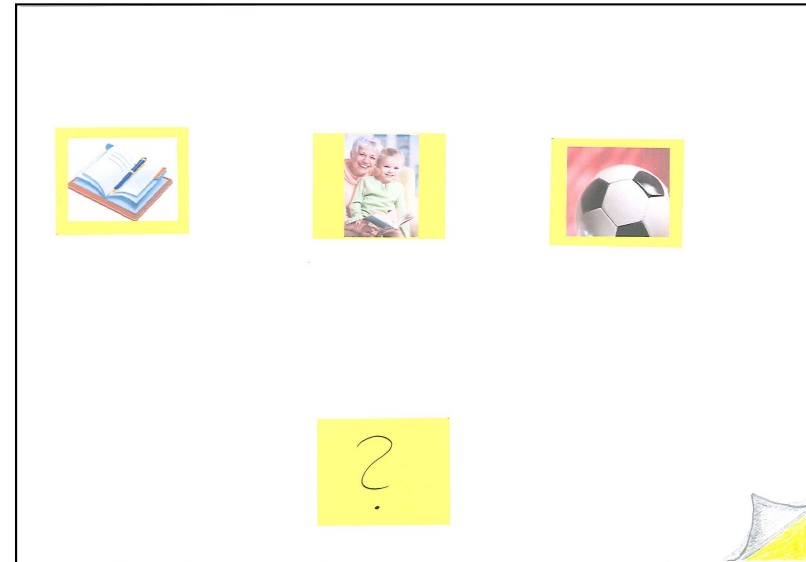
# Paper Prototype Discussion

- Pros:
  - Simple
  - Speaks user language
  - Minimize User memory load
  - Good visibility of the functionalities



# Paper Prototype Discussion

- Cons:
  - Not clear which step we are in
  - Different metaphors
    - Go to the next step upon selecting an item
    - First selecting an item then pressing next button (like book)
  - Too little personalization
  - Question mark functionality is not explained
  - Clear exits are missing

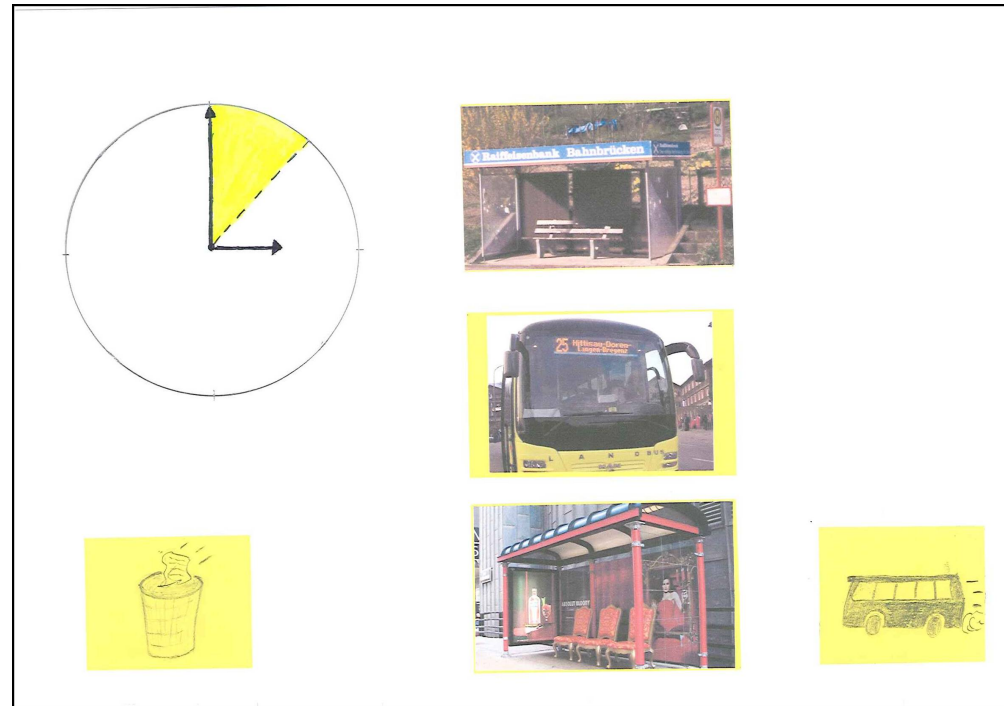


# Paper Prototype Discussion



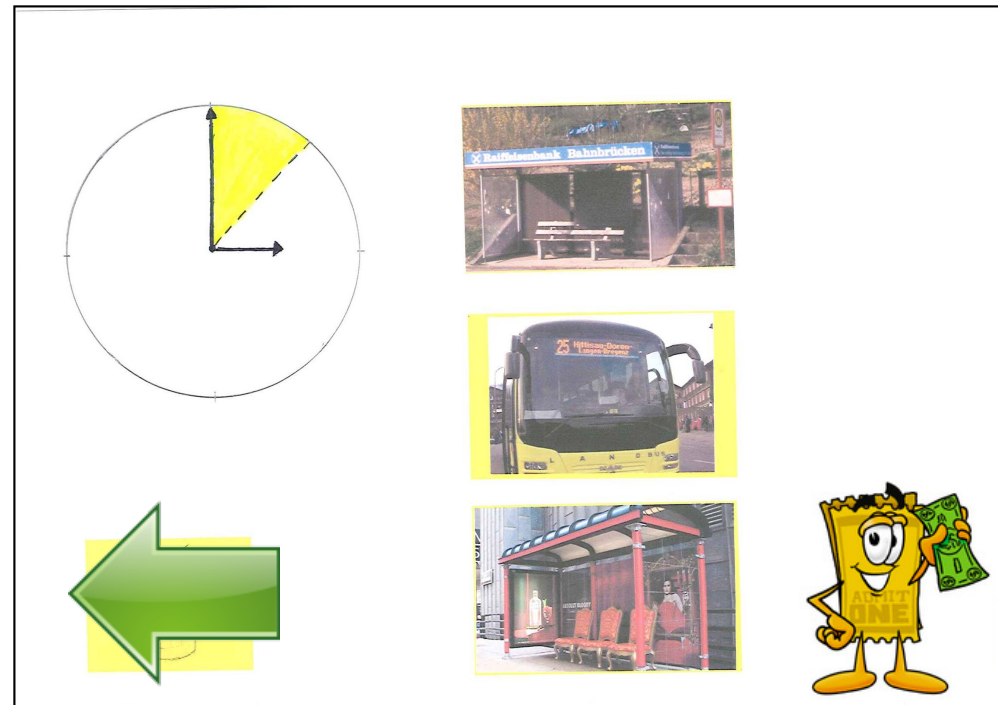
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- Pros:
  - Good visibility with real world pictures
  - Good time visualization (numbers might help)
  - Very simple



# Paper Prototype Discussion

- Cons:
  - Not clear functionality of:
    - trash bin: cancel or go back ?
    - bus button: purchase or get time plan ?
  - Consistency



# Paper Prototype Discussion



- Pros:
  - Good design (differentiating between ages)
  - Providing more complex func. like „Sonderziel“
- Cons:
  - Picture can still help



# Paper Prototype Discussion

## ■ Pros:

- Visualizing the connection type

## ■ Cons:

- Too much buttons: can be done by making a list
- The time is not clear: waiting time or traveling time
- Exit or back is not provided

