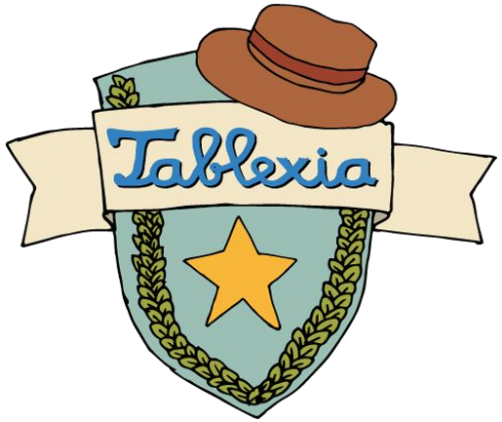


Tablexia

Cognitive Training for Children with Dyslexia

Andrea Šíchová

FOSDEM, 05. 02. 2017

cz.nic | CZ DOMAIN REGISTRY

CZ.NIC

- CZ domain registry
- Non-profit
- Support of new technologies and beneficial projects

CZ.NIC Labs

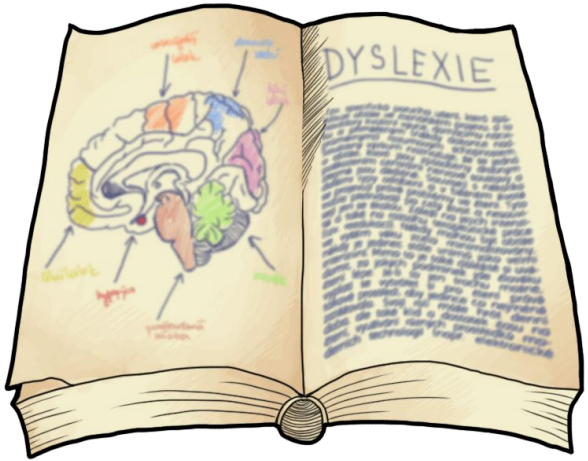
- R&D department
- Open-source development
- Turris Omnia, Knot DNS, BIRD

Tablexia

- Cognitive training for children with dyslexia
- 11-15 years
- Android, iOS
- CZ, SK, DE
- 8 games in detective theme

- Schools
- Counseling facilities
- Individual use

Dyslexia



- **Specific learning disability**
- Neurobiological origin
- **Reading and writing problems**

- **Cognitive functions** - working memory, attention, spatial orientation...
- Different learning strategies

Cooperation

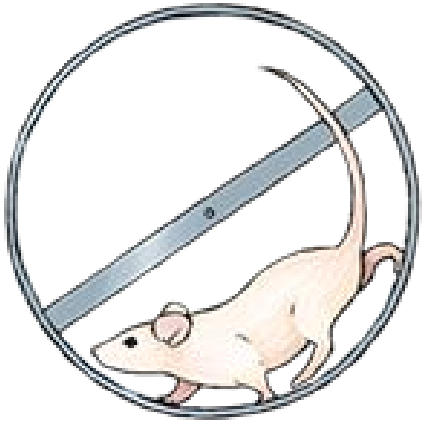
- Charles University in Prague
  - DYS-Centrum Prague
  - 11 schools in Czechia
- Constantine the Philosopher University in Nitra
  - 3 schols in Slovakia
- University of Vienna
- Chemnitz University of Technology

Technology

- Android → AndEngine
- Cross-platform development → libGDX
  - iOS, Android, Desktop
  - Java, C, C++
  - Apache 2 Licence
- Open source (GPL)
- https://gitlab.labs.nic.cz/labs/tablexia

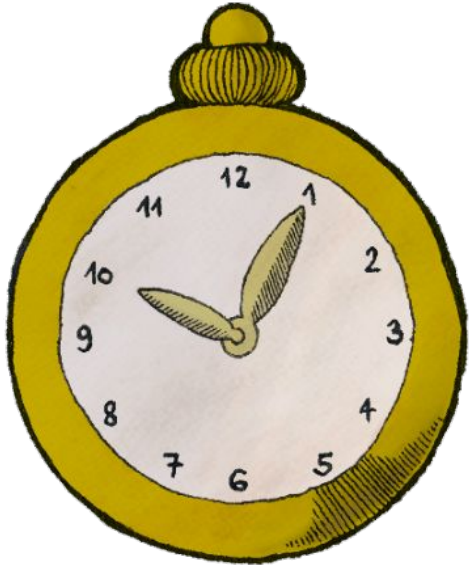
Testing

- Internal testing
- Game mechanism and difficulty
  - Data from the App
  - Questinnaires
- Effectivity
  - Pre- and posttest design



Future

- 2 more games
- Desktop
- Other languages
- Difficulty adjustment



warnung
Der Einbrecher bzw. die Einbrecherin trägt ein gelbes Damentuch und eine Damenbrille.
Ich verstehe

!!!!
Lupič!
ČASOPIS
ZODIAK
6

Přehrát znovu

HLÍDKA

V KOLIK HODIN SE V DOUPĚTI ROZSVÍTILO?

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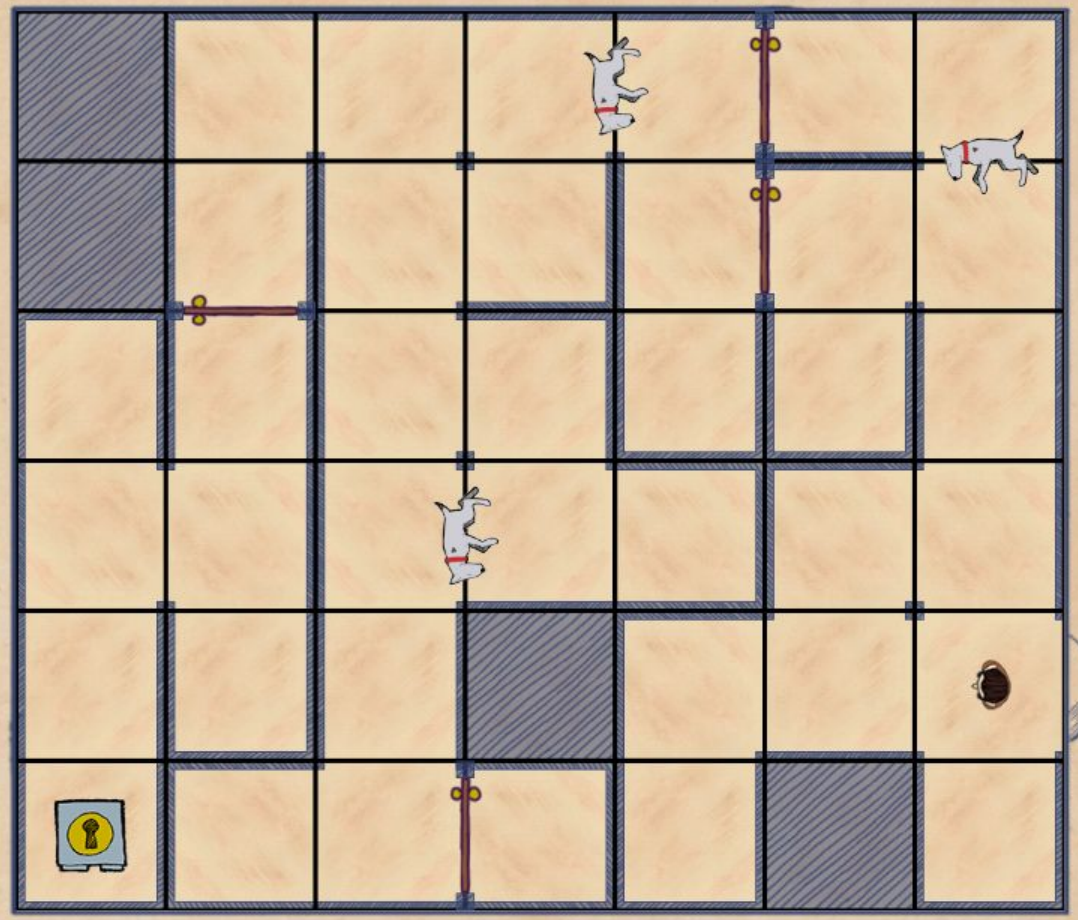

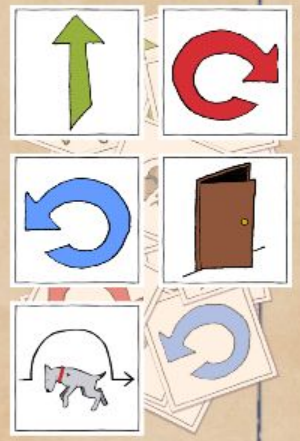

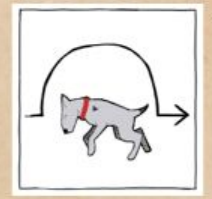

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11

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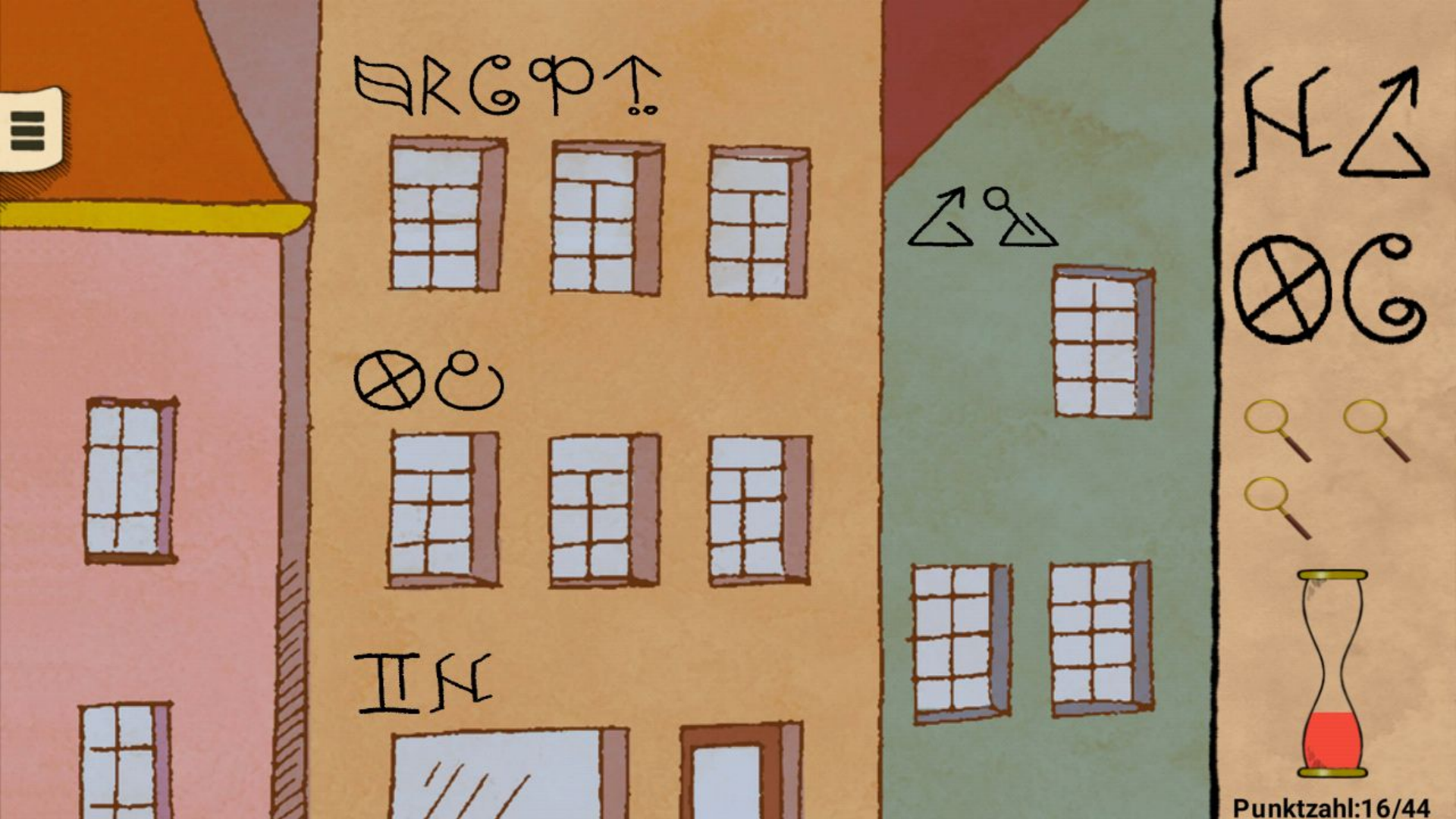
8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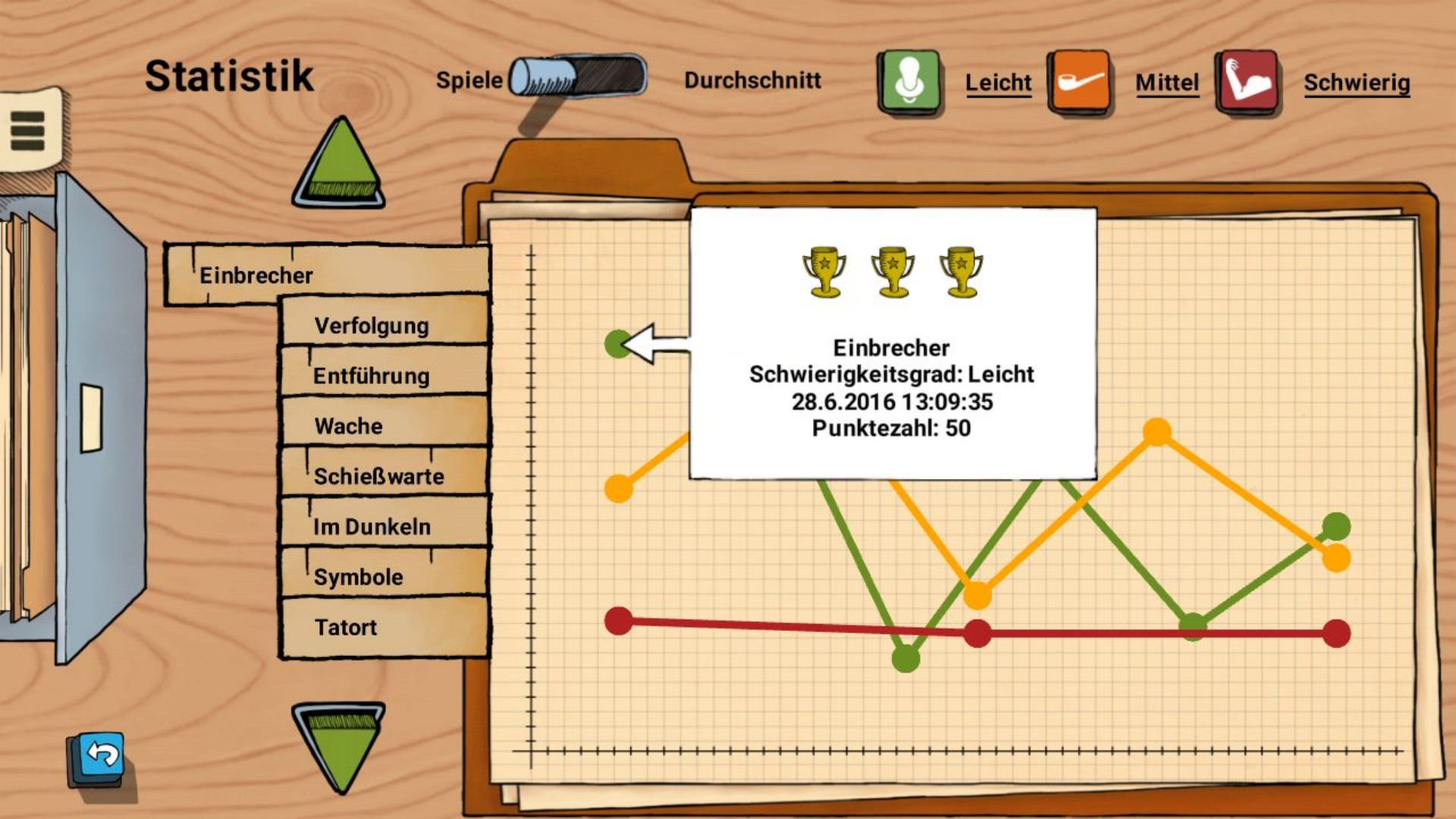
Statistik
Spiele
Durchschnitt
Leicht
Mittel
Schwierig
Einbrecher
Verfolgung
Entführung
Wache
Schießwarte
Im Dunkeln
Symbole
Tatort
Einbrecher
Schwierigkeitsgrad: Leicht
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Punktezahl: 50

Introduction

Specific Learning Disabilities
Dysgraphia
Dyslexia
Dysorthography

Memory
Short-term memory
Working memory
Auditory memory
Visual memory
Spatial awareness
Seriality
Auditory discrimination
Visual discrimination
Verbal skills

Famous Dyslectics

Specific Learning Disabilities

A term that includes dyslexia, dysgraphia, dysorthography, and also dyscalculia (difficulties in math skills) as well as some other less common forms of learning difficulties (e.g. dyspraxia or physical clumsiness).

The advantage of this designation is that it includes all kinds of difficulties into one category. Very often it happens that a person who has dyslexia has also dysorthography and dysgraphia. Therefore, when we say a person with dyslexia or dyslexic person in everyday speech, we usually mean a person who has difficulties in reading and writing.

The disadvantage of this term, however, is that the word “learning” makes us think of the school environment too much, and therefore sometimes it might make you forget that these difficulties are reflected in extracurricular, daily activities, and persist into adulthood, when we don’t go to school anymore. Besides, the word “disability” doesn’t sound too good. Much more important is to approach people with dyslexia, dysgraphia or dysorthography as those who learn and work differently. They are not “disabled”; they just need to work in different conditions. And after all it is normal that everybody is different.

Tip: Do you have a required reading list at school? Read the book as an e-book using an e-reader (where you can easily adjust the font size and the amount of text of the page) or get it as an audiobook and “read with your ears” through MP3.

Thank you for your attention!

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