

Serious gaming helps children view Highway Code from another perspective

Anthoula Alipasali

Anton Eliens

Vrije Universiteit Amsterdam

Categories

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Serious games

Serious games:

- Refer to digital games used for purposes other than mere entertainment.
- They simulate environments and systems
- Allow learners to experience cases that are not possible in real life

Serious games

Three main reasons that Serious games are used:

- Safety
- Cost
- Time

Serious games

Is Serious gaming familiar to children?

The Federation of American Scientists suggests that kids from 8 to 18 years old usually spend approximately 50 minutes per day playing video games [3]

Serious games and education

A knowledgeable pedagogue transmits the knowledge to learners via:

- Lectures
- Books
- Articles

Serious games and education

Limitations in the traditional learning paradigm:

- Teaching is an indispensable condition for learning
- The ultimate testing and skill acquisition and knowledge are not usually for knowing
- Emphasize the transmission of knowledge from an acknowledged special to individuals in isolation

Serious games and education

- Learning only what a person intends is not the most desirable
- The physical layout of classrooms and the structure of classes transfers meta-messages about knowledge creation, acquisition and use.
- Small capacity to accommodate linkages between affective, behavioral, and cognitive domains [7]

Serious games and education

- Dissemination of gaming
- Engaging educational practices
- Worldwide use of the Internet



A paradigm shift, offered by serious gaming, which show us how the education and training should be delivered in the 21st century

Knowledge types

- Communication knowledge
- Situated knowledge
- Tacit knowledge
- Imperative knowledge
- Explicit knowledge
- Embedded knowledge

Knowledge processes that are supported

- Hand and eye co-ordination
- Spatial awareness
- Memory and lateral thinking
- Cognitive thinking
- Self – assessment and analysis
- Spatial abilities
- People, job-specific, organization, communication, and strategy skills

Highway Code game

- The Highway Code serious game is developed to teach children the highway code.
- Children have much less limited attention span than the adults.
- Children will be able to exercise, learn the signs, and having fun at the same time

Highway Code game

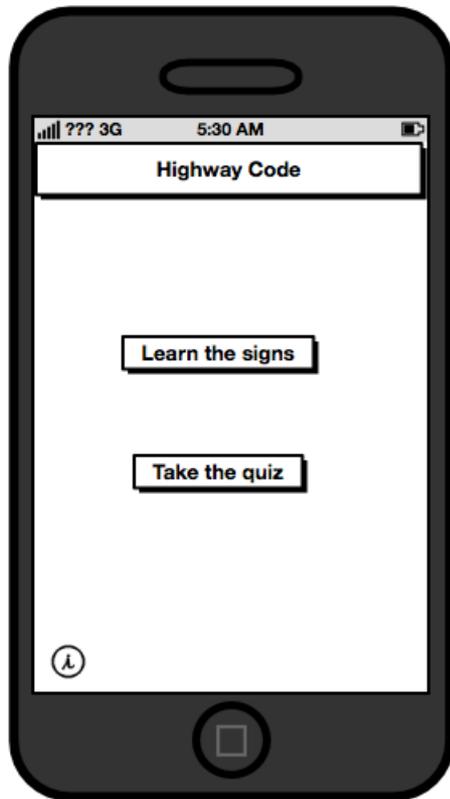
- Is built for iPhone devices (ios 6)
- Portrait mode
- Appcelerator Titanium is used for building the app

Significant benefits of Highway code game

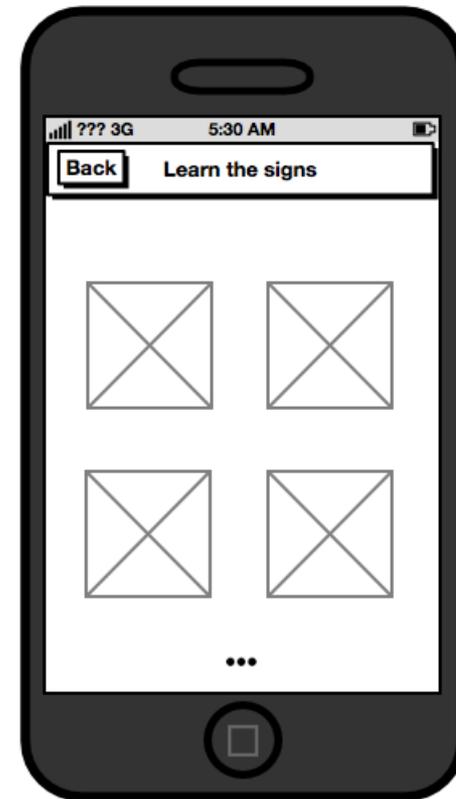
- Situated knowledge
- Tacit knowledge
- Embedded knowledge that is locked in processes
- Hand - eye co-ordination
- Spatial awareness
- Memory and lateral thinking
- Cognitive thinking
- Self- assessment and analysis

Wireframes

Main window

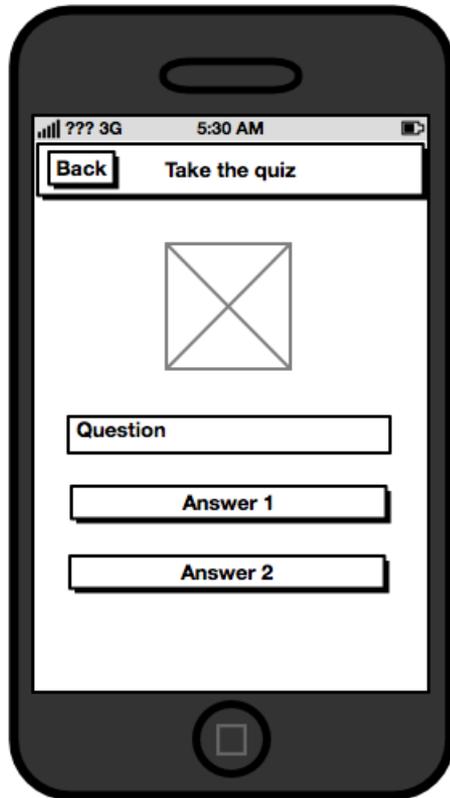


“Learn the signs” window

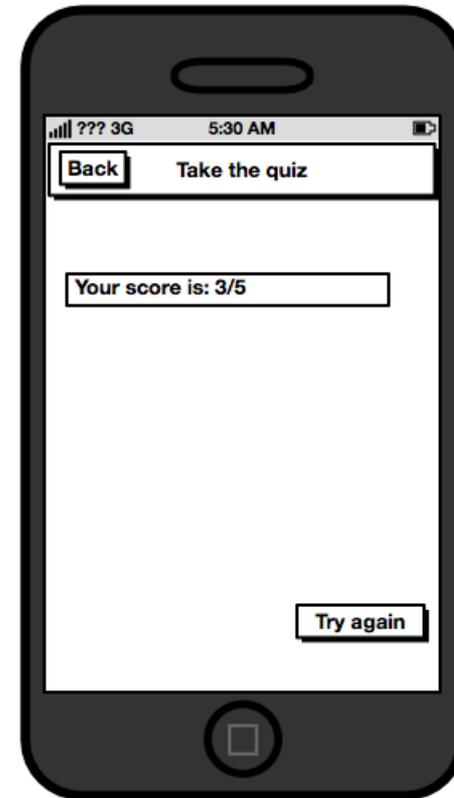


Wireframes

“Take the quiz” window



“Quiz results” window



Highway code

“Take a quiz” window



“Learn the signs” window



Dissemination of the game

- Free of charge application
- Focus on schools
- Focus on parents
- Persuade teachers and parents about the importance of that application
- Use social networks

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QUESTIONS ?