



Educational game

MyDiabetic

For children 5-12 years with T1D

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CTU, Prague



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Goals

- TO HELP CHILDREN UNDERSTAND THEIR DISEASE.
- CARBS COUNTING
- SHOW SYMPTOMS OF HYPO/HYPERGLYCEMIA AND SOLUTION
- INSULIN TREATMENT DEMONSTRATION
- MOTIVATION TO MOVEMENT
- NOT JUST EDUCATION BUT JOY
- ALSO FOR FRIENDS !!!

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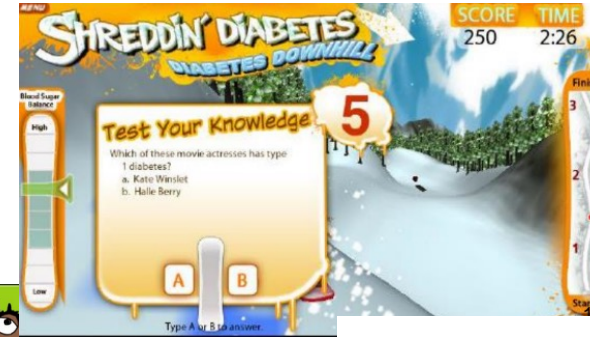
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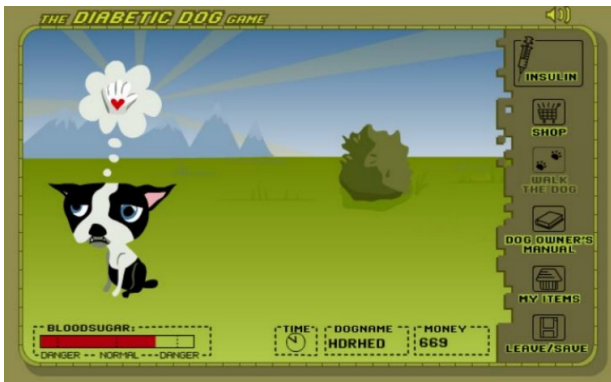
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Some games



Learn about type 1 diabetes by taking care of Jerry!



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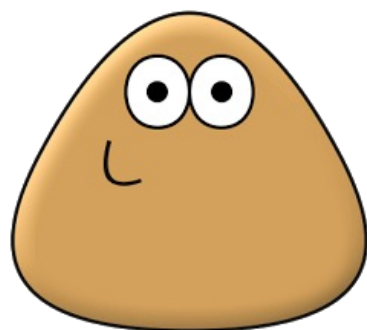
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Game concept



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User-Centered Design



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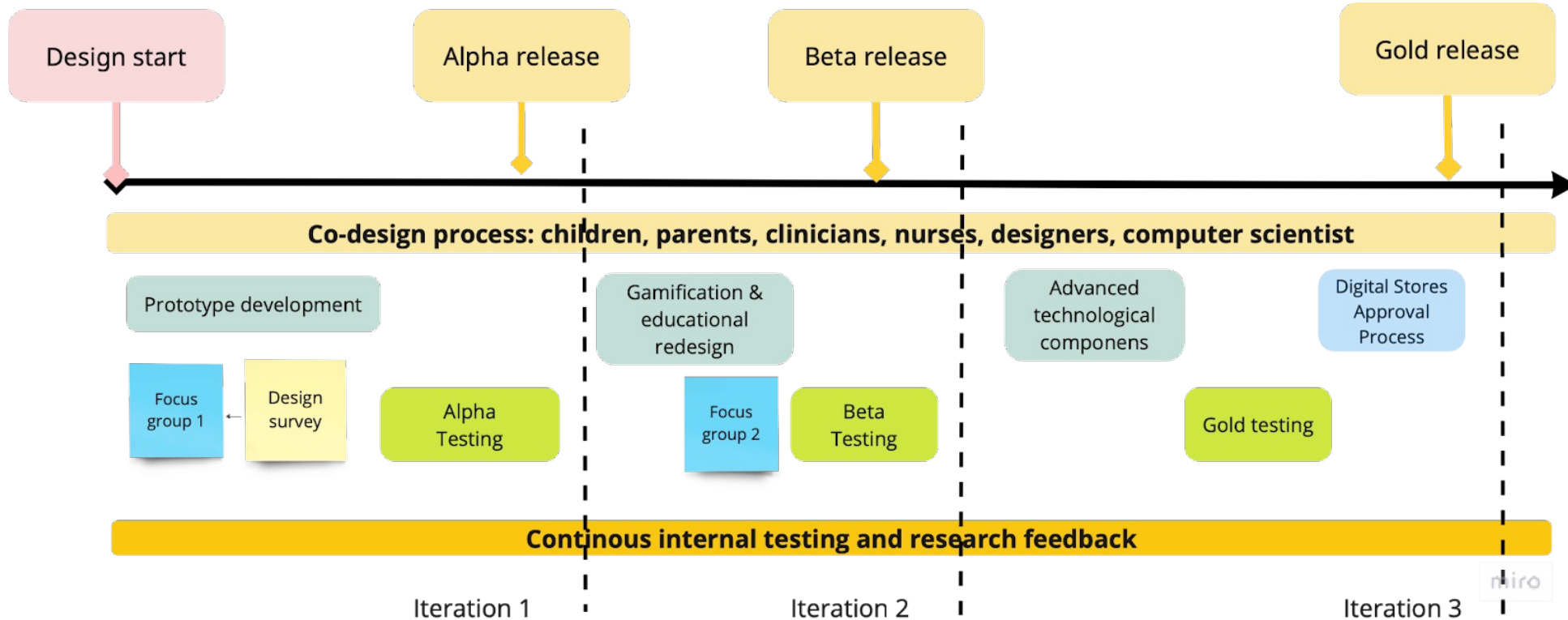
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Participatory Co-Design



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Participatory Co-Design

Iteration	Activity	Users (m/f)	Age range	Stages of development	Features introduced
1	Focus group	4/0	11-14	mock-up	Basic gaming concept, design of control elements, taking-care avatar concept, carb counting, insulin-pen application, glycemia measurement, practising sports
	Design survey	15/12	7-13	mock-up	
	Alpha testing	8/4(*)	6-13	Alpha release	
2	Beta testing	2/4	5-15	Beta release	Education elements as virtual interactive library or simulations of blood glucose, minigames, story line and levels design
3	Gold testing	7/2	10-15	Gold (final) release	Advanced topics as CGM and insulin pump illustration, measurement ketoacidosis and application of glucagon
		2/5	8-16		
		4/4	7-15		

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Main design



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First symptoms



Tvoje postavička má cukrovku

Dříve mu hladinu cukru v krvi hledala slinivka, ta přestala pracovat, a proto mu ji teď musíš hlídat ty.

5,4 mmol/l

Insulin

Pokračovat

>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent id justo in neque elementum ultrices. Integer in sapien. Aenean placerat. Nullam faucibus mi quis velit.

Duis risus. Aliquam in lorem sit amet leo accumsan lacinia. Sed ac dolor sit amet purus malesuada congue. Nam sed tellus id magna elementum tincidunt. Maecenas

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Glycemia measurement



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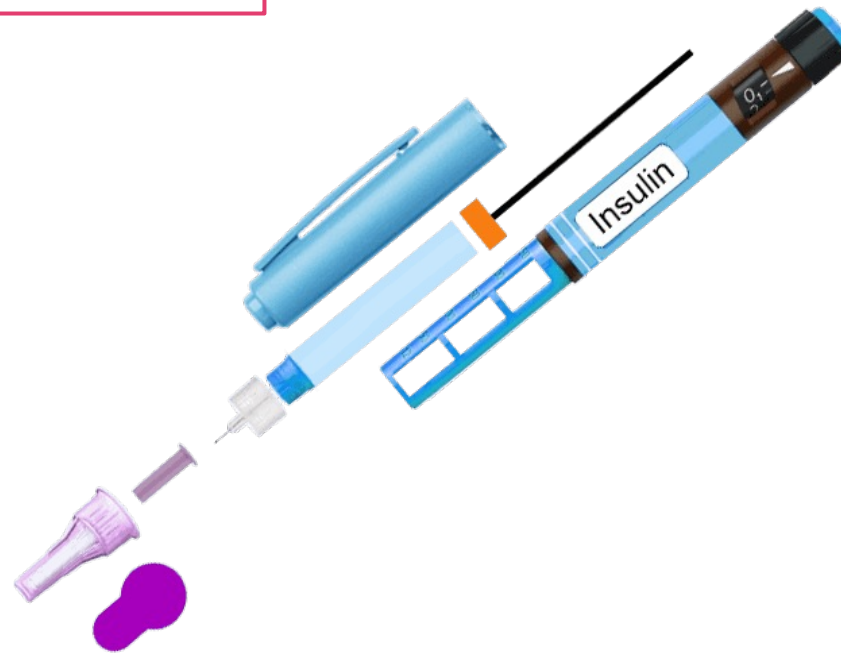
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Demonstration of insulin application



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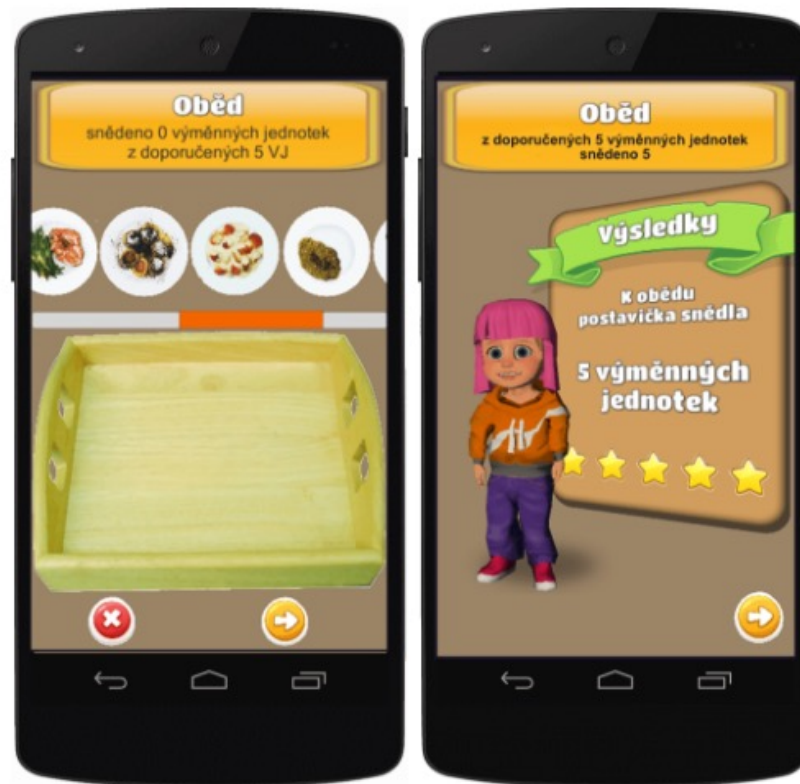
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Carbs counting



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Symptoms of hypo/hyper



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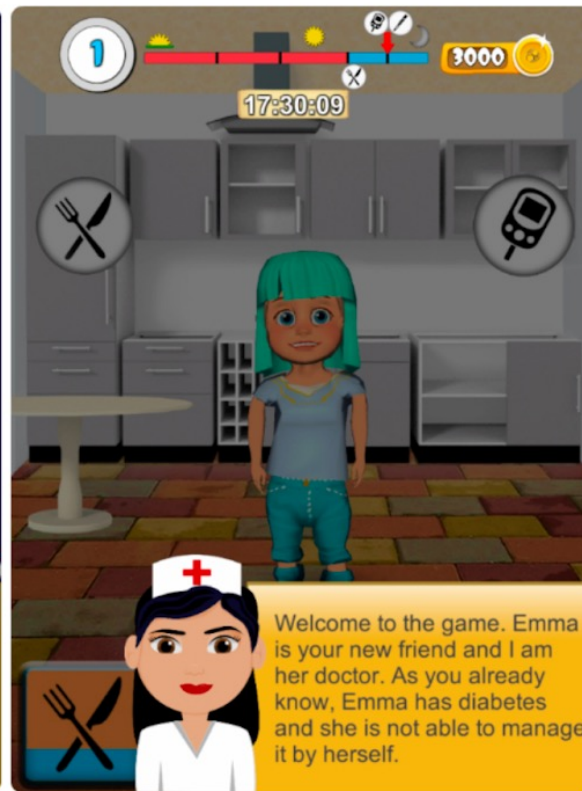
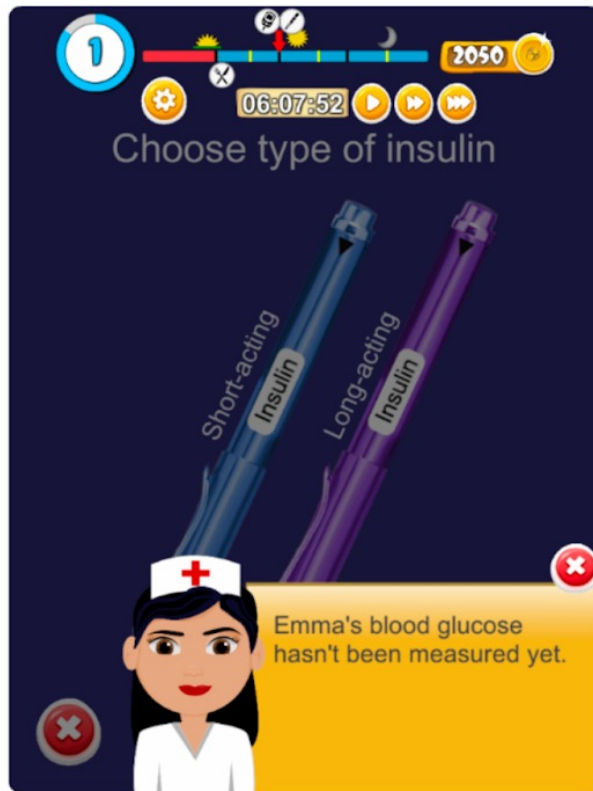
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Preschool children - audio guidance



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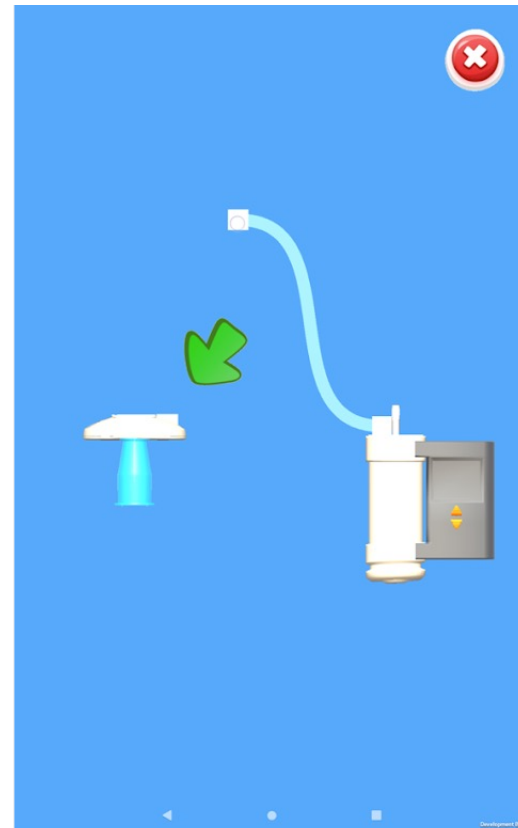
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Insulin pump: infusion set replacement



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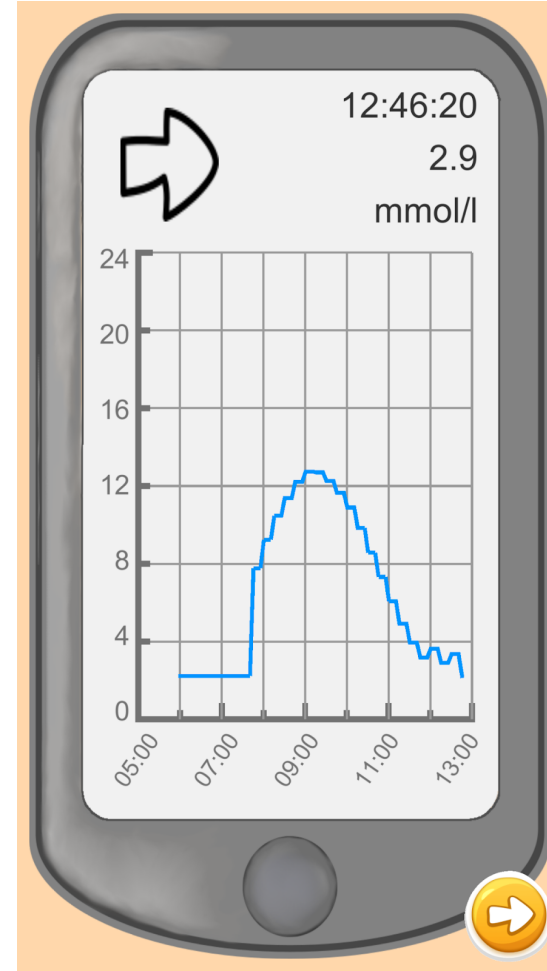
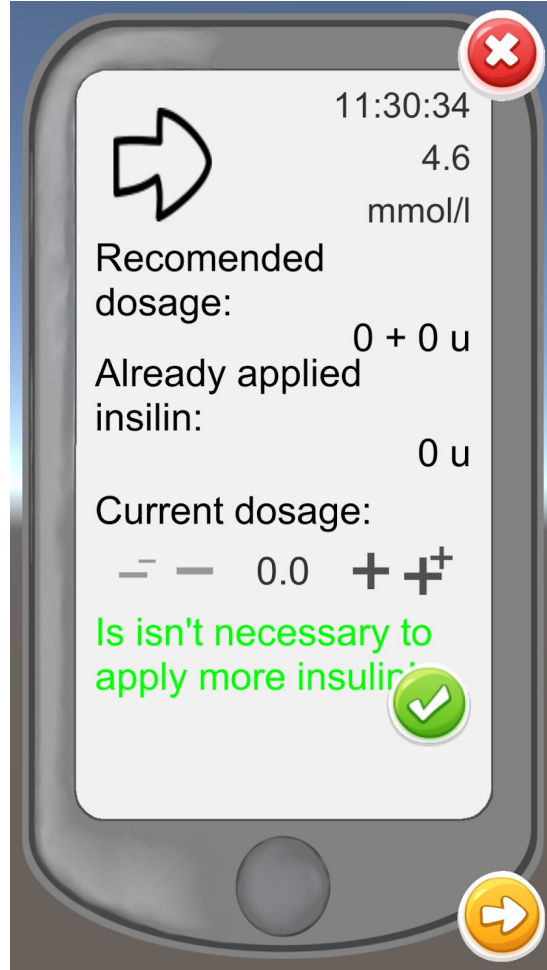
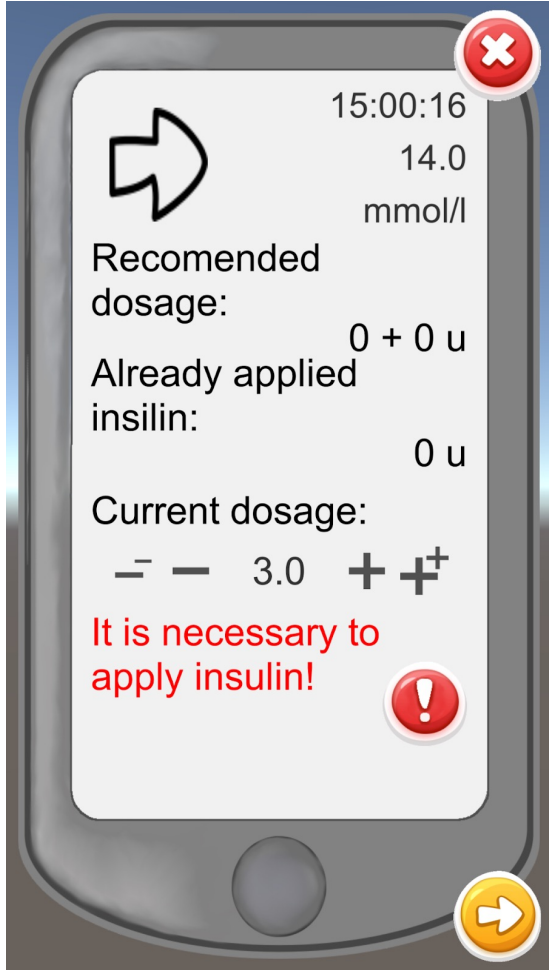
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CGM



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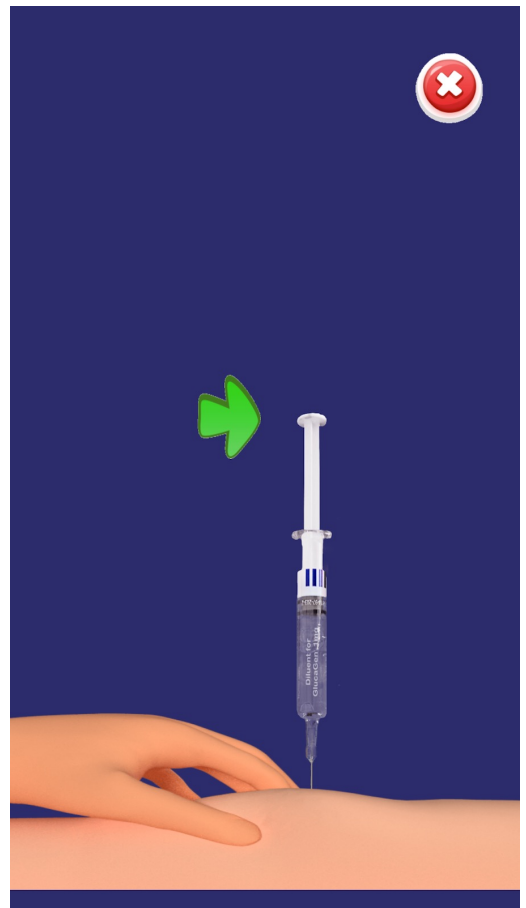
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Glucagon application



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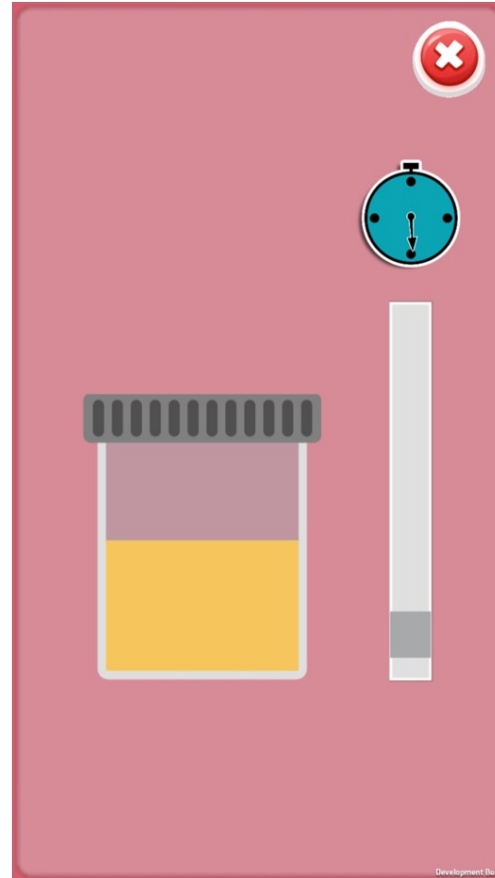
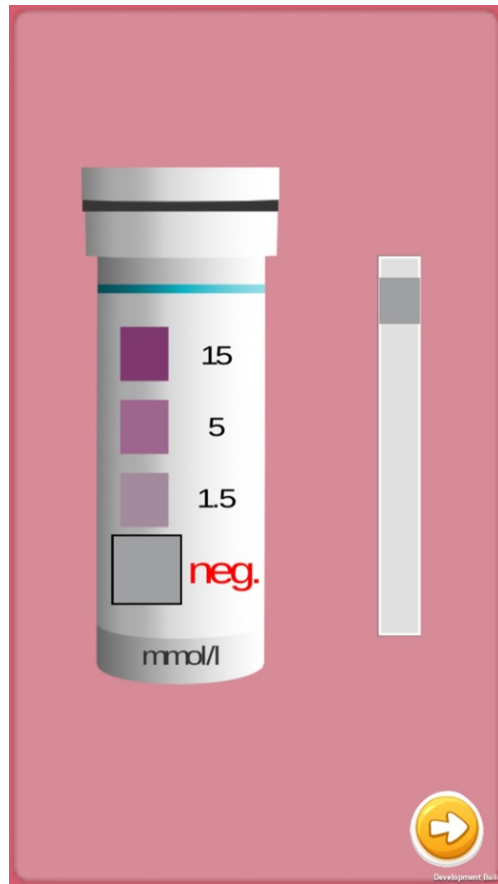
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Ketones urine test



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Usability testing



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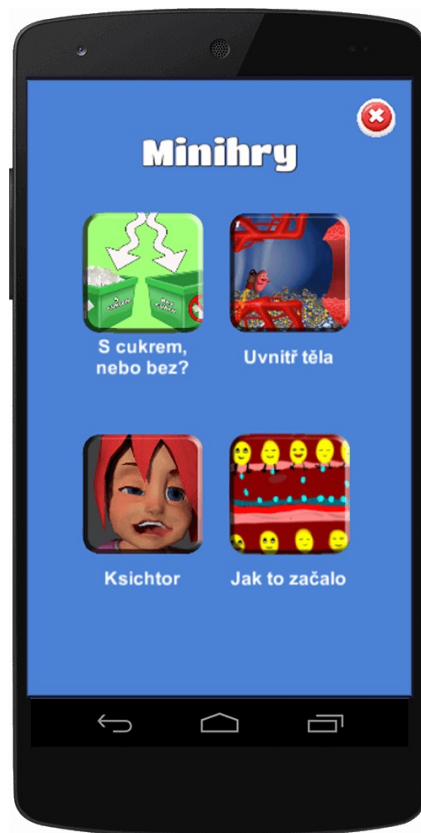
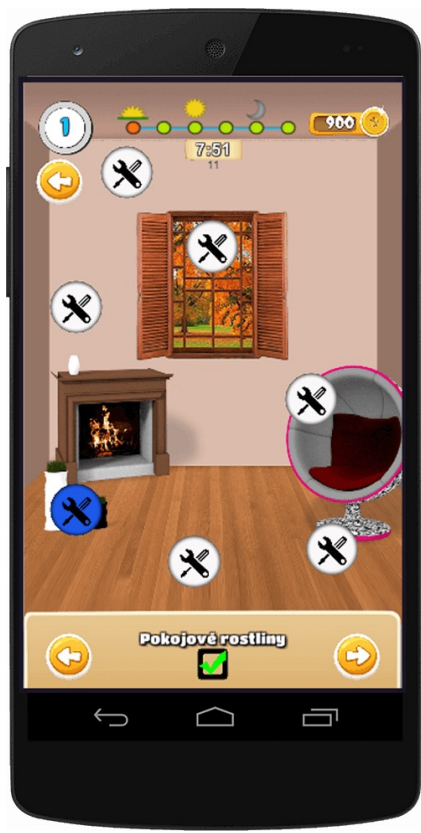
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Education but joy



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Education but joy

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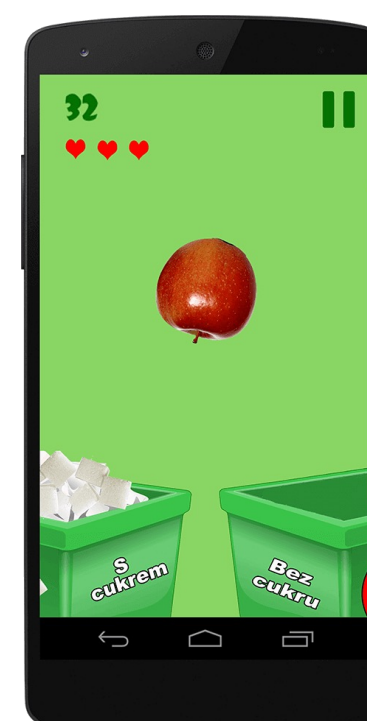
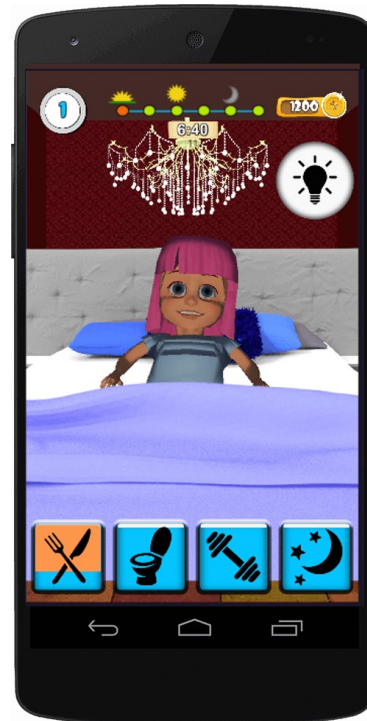
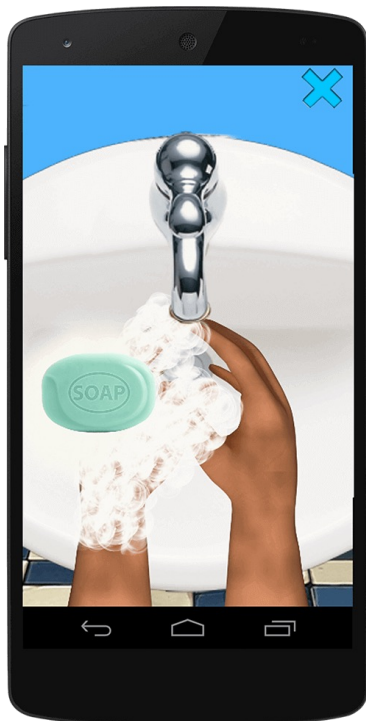
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Some stats

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My Diabetic - edukační hra

MyDiabetic



4,7★

38 recenzí

1 tis.+

Stažení

3

PEGI 3

Instalovat do více zařízení

Nemáte žádná zařízení

Hyperglykemie



Mac

iPad

iPhone

Watch

AirPods

TV a

review

Open the Mac App Store to buy and

MyDiabetic

4+

Daniel Novak

Design pro iPad

4.3 • 3 ratings

Free

[View in Mac App Store](#)

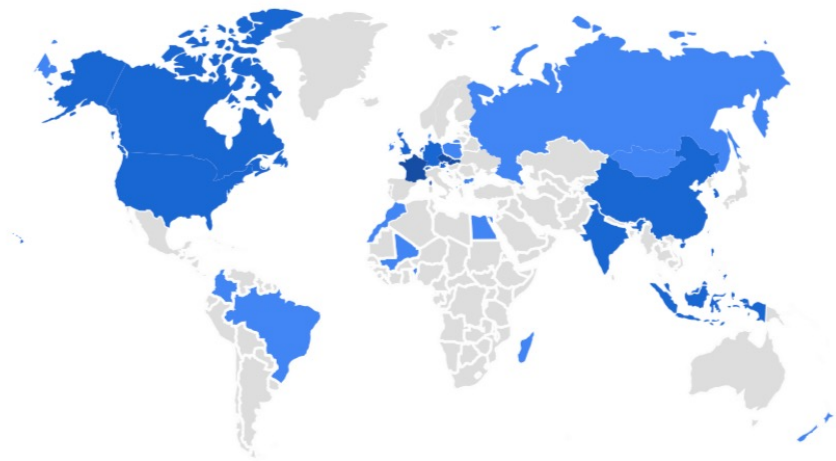
MyDiabetic

www.my-diabetic.com



Some stats

Users ▾ by Country



COUNTRY	USERS
Czechia	347
Slovakia	147
France	119
United States	63
Germany	8
South Korea	6
Netherlands	5

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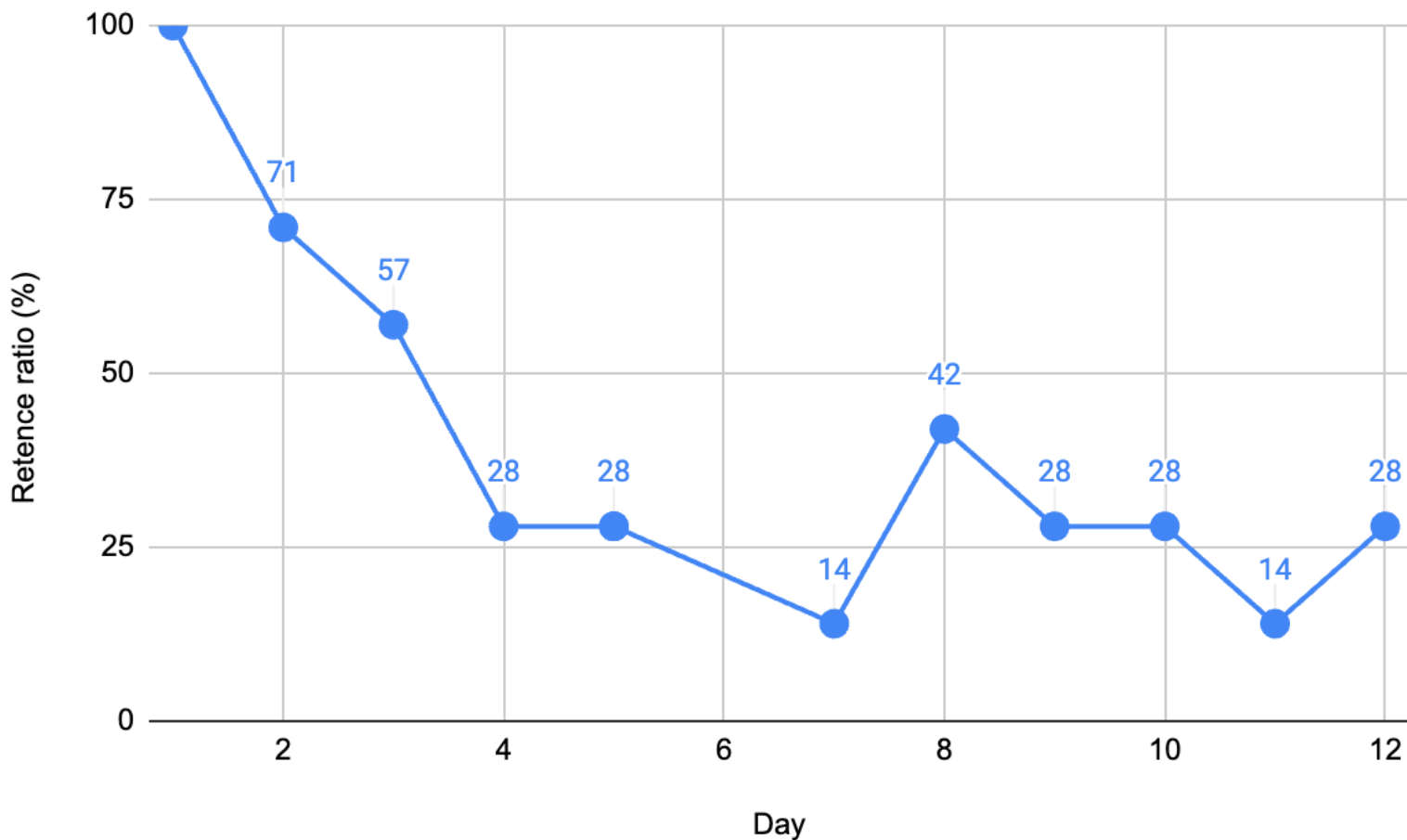
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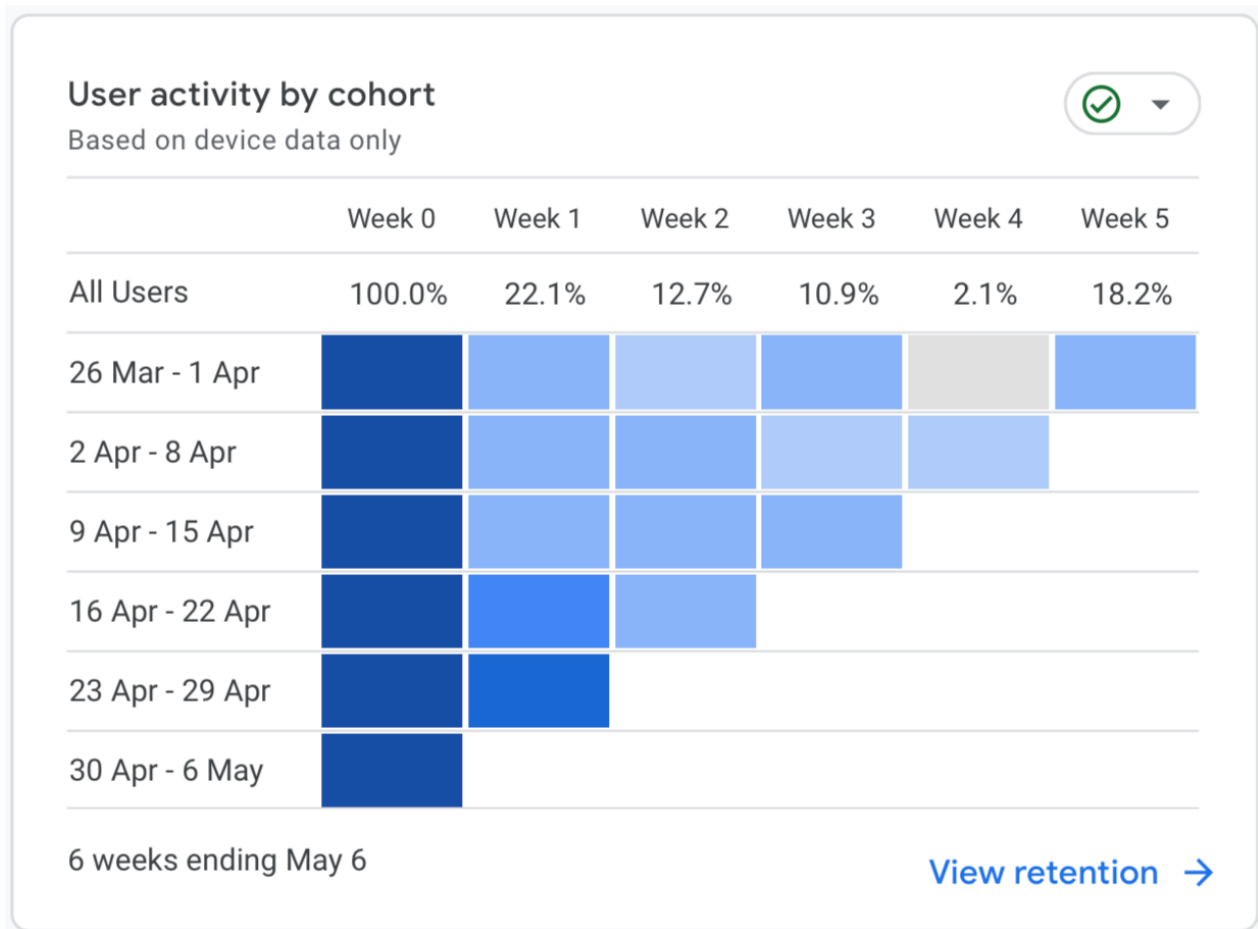
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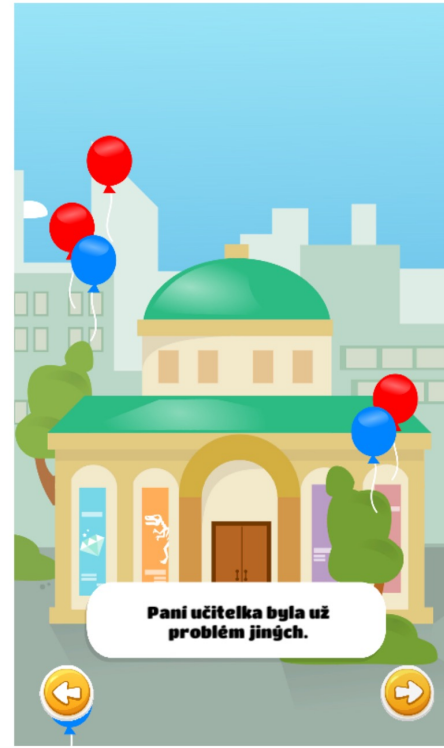
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Story lines concept



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Complications



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Conclusion

- **CHILDREN AND PARENTS LIKE THE GAME**
- **ADHERENCE IS AVERAGED COMPARED TO LITERATURE**
- **FURTHER DEVELOPMENT TO INCREASE ADHERENCE**
 - Big competition from game industry
- **OBSERVATION STUDY IN CLINICAL SETTINGS**
 - Educational effect, compensation using e.g HbA1c?
- **MEASURING EDUCATIONAL EFFECT**
 - Significant improvements

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MyDiabetic

www.my-diabetic.com



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