



Module Code & Module Title
FC6P01NT - Final Year Project

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2021 Autumn

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I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

1.1. Review of similar systems

1.1.1. Colors & Shapes Game - Fun Learning Games for Kids

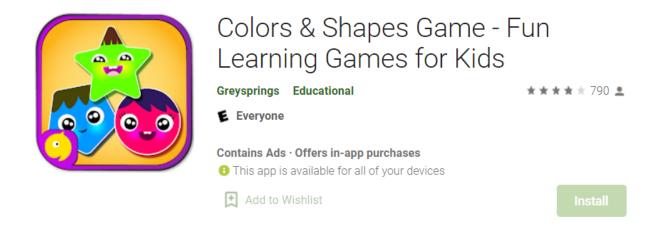


Figure 1: Colors & Shapes Game- Fun Learning Games for Kids

Colors & Shapes Game is an education games for kindergarteners (age 2-6) years. This game includes educational games activities to teach kindergarteners about shapes & colors using vegetable/fruit and other real life household objects. Kids Learn Shapes & Colors is a fun and educational software that children will enjoy. The game's experience is enthralling to children since there is no winning or losing. The activities are meant to help kids learn shapes and colors while also expanding their early learning and discovering new sounds. Kindergarten children enjoy cartoon coloring pages, thus free coloring books are creative games for them which is included inside this game (Grey Springs, 2021).

- ★Learning Shapes & Colors Games for Kids
- Attractive and enticing designs and pictures for learning shapes and colors for preschool children
- ¶ Engaging kids learning activities for toddlers for early childhood education about Shapes and colours
- An interactive and engaging way, meant for early learning for kids
- P Colors for kids is a great learning game for children
- The tracing of geometric shapes for toddlers enhances hand eye co-ordination and motoring skills. It not only enhances the hand eye co-ordination but also prepare the child for writing, without even knowing the she is being trained for writing
- P So Many free coloring pages for kids to enjoy unlimited fun
- Painting using pencils and crayons to color the Geometric shapes for toddlers and so many coloring pictures and sheets
- P Learning Shapes and colors for toddlers has been presented in the form of fun learning activities like Dragging the monster for space jump, feeding hungry frog, Balloon pop quiz, Odd one out, Honey bee etc.
- ¶ Many interactive activities to teach about different geometric shapes like Circle,Square,Triangle,Heart,Diamond,Star,Semicircle,Oval,Rectangle,Pentagon,Hexagon etc.
- In the activity Robot factory, Kindergarteners learn about shapes and their usage.
- ¶ Hidden object Games- Scratch and reveal different colorful Geometric shapes.

Figure 2: Specialties of Colors and Shapes games

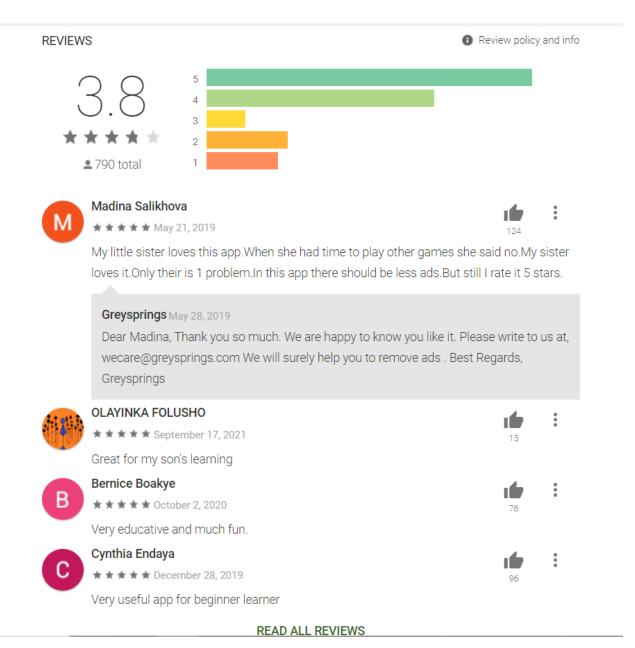


Figure 3: Some reviews on Colors and Shapes games

Updated	Size	Installs
August 23, 2021	Varies with device	100,000+
Current Version	Requires Android	Content Rating
4.0.7.5	4.4 and up	Everyone
		Learn more
Interactive Elements	In-app Products	Permissions
In-App Purchases	\$1.81 per item	View details
Report	Offered By	Developer
Flag as inappropriate	Greysprings	Visit website
		contact@greysprings.com
		Privacy Policy
		GREYSPRINGS
		SOFTWARE SOLUTIONS
		PVT LTD C-126, 1ST
		FLOOR, NARAINA
		INDUSTRIAL AREA,
		PHASE-1 NEW DELHI-
		110028, DELHI, INDIA

Figure 4: Additional Information on Colors and Shapes Games

1.1.2. Masha and the Bear: Water game

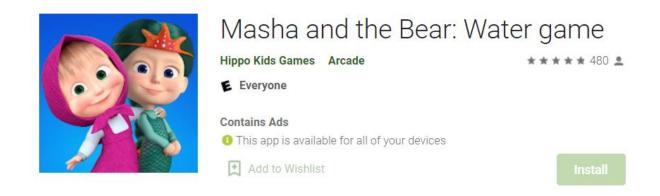


Figure 5: Masha and the Bear: Water game

Masha and the Bear: Water Game is an educational game for kids whose age is 3-7. This is an easy educational game that will help player to learn colors, find the same items and make various puzzles. The characters from children's favorite cartoons are use in this game to make it more fun and interesting for children (Hippo Kids Games, 2021).

- If you like cartoons and funny puzzles, Masha and the Bear are ready to bring you to their team. Hurry up! This game set about Masha has both educational and entertaining elements. That's why these educational games for kids from 3 to 7 years are perfect for toddlers and their parents.
- © Download this app and visit a magical underwater world with cartoon characters. Educational mini games create a real fairy tale. Golden fish, sunken ships, treasure chests, mermaid and a lot of other creatures from the underwater world.
- Find pirate treasures. The Bear uses her fishing rod to find coins at the sea bottom. But don't touch fish, we are interested in the golden treasures.
- Mooden trunks will help us to get to the other side of the river. Be an attentive player not to let Masha fall into water.
- Collect puzzles with amazing marine pictures. Beautiful puzzles are created especially for preschoolers.
- Feed friends. Choose food for every animal. We are going to cook in the nature.

Figure 6: Specialty of Masha and The Bear: Water Game

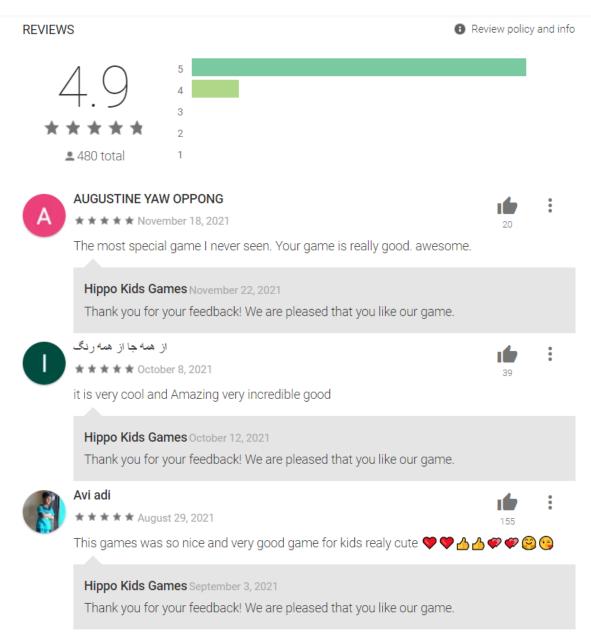


Figure 7: Some Reviews for Masha and the Bear: Water game

Updated	Size	Installs
October 29, 2021	90M	100,000+
Current Version	Requires Android	Content Rating
1.0.43	4.4 and up	Everyone
		Learn more
Interactive Elements	Permissions	Report
In-Game Purchases	View details	Flag as inappropriate
Offered By	Developer	
Hippo Kids Games	Visit website	
	report.psv@gmail.com	
	Privacy Policy	
	Ukraine	

Figure 8: Additional features of Masha and the Bear: Water Game

1.1.3. Adventure Academy

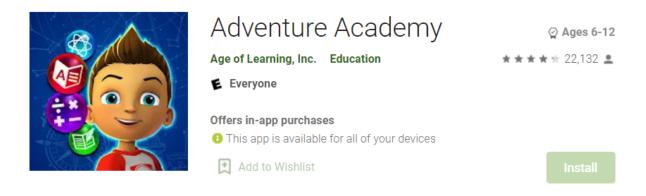


Figure 9: Adventure Academy

Adventure Academy is an educational adventure game which is playable by the age group 6-12. In Adventure Academy, players will travel around the academy and solve the problems of math, science, grammar, etc. to level up. This game will increase the player knowledge about academy studies and also help them to increase their problem-solving skills. Not only kids but also the early teenagers are also suggested to play game (Age of Learning, 2021).

Key Features:

Discover and play thousands of learning activities to help boost key skills and abilities across many subjects, including math, language arts, reading, science, social studies, and more

Share amazing experiences with your best friends in a safe and secure environment

Play simultaneously with up to three other scholars within the same account on your individual smartphone, tablet, or computer

Crafted by teachers and early learning education experts with a curriculum-first approach

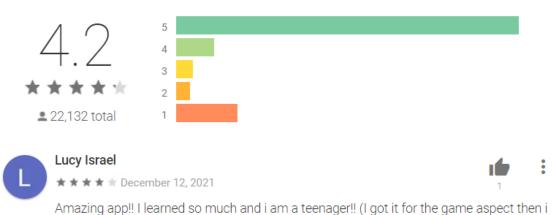
Complete quests and learning challenges with your friends to level up and advance your character's abilities

Great for homeschoolers and learning on the go

As you continue your journey through Adventure Academy, you can also earn amazing rewards for your accomplishments. Hundreds of clothing items, hair styles, and looks give a seemingly unlimited number of choices to customize your character. Also, you can earn your own 3D virtual home within the game that you can decorate with items you earn from completing learning activities.

Trusted by teachers and designed by early learning education experts, Adventure Academy provides a safe learning environment for students. Parents can monitor progress, control the level of interaction through filtered chat, or block in-game communication entirely.

Figure 10: Key Features of the Adventure Academy



started learning stuff, so, it was kinda funny!!!) Would give it five stars, but it lags behind sometimes, and its kinda annoying, but, dont get me wrong! I LOVE THIS AND YOU NEED TO GET IT!!.TRUST ME, YOU WIL ...

Review policy and info

Full Review

Age of Learning, Inc. December 12, 2021

Thank you for your feedback, Lucy! If you experience lagging often, we would be more than happy to take a closer look into the issue. Please have a parent contact us at http://adventureacademy.com/contact-us.



It does load slow but I have always been able to get the app to work. It was too big of a file for my Chromebook to handle but my iPad does well and my cell phone does well. My only issue with it is that there is not enough education in it. it takes a long time to get to the actual education part of...

Full Review

Figure 11: Reviews for Adventure Academy

REVIEWS

Updated	Size	Installs
November 10, 2021	110M	1,000,000+
Current Version	Requires Android	Content Rating
1.040.002	5.0 and up	Everyone
		Learn more
Interactive Elements	In-app Products	Permissions
Users Interact	\$9.99 - \$79.99 per item	View details
Report	Offered By	Developer
Flag as inappropriate	Age of Learning, Inc.	Visit website
		academysupport@aofl.com
		Privacy Policy
		101 North Brand Blvd,
		8th Floor Glendale, CA
		91203

Figure 12: Additional Information for Adventure Academy

1.1.4. Baby Games for 1+ Toddlers



Figure 13: Baby Game for 1+ Toddlers

Baby Games for 1+ Toddlers is a game application for kids of the age group of 2-4 years. In this game, Kids will learn colors, shapes and follow through simple thematic stories. Like caring for cute animals, or sorting things by size, color and shapes (kidsEducational, 2022).

15 Ads Free learning games for kids under 5!

Educational activities in the games are planned and tested by experts.

Free toddler games in the app, provide great **learning and entertainment experience** for preschool children, both **baby boys and girls**. They will spend time flexing and improving their **motor skills**, star recognizing **colors and shapes**, follow through the baby games with **simple storyline**.

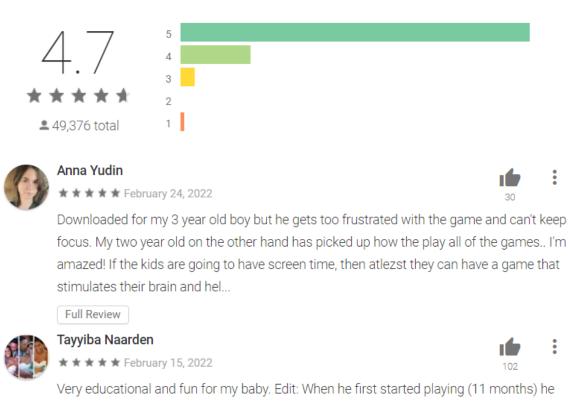
Learning experience is planned and tested by toddler development experts, to be best suited for kids under 5 years and to be **simple, fun and educational at the same time!**

Additionally all the settings and outbound links are protected and inaccessible for babies.

Please support us by writing reviews if you like the app and let us know about any issue or suggestions too.

This baby games app is free and without any ads! Enjoy your time with your kids!

Figure 14: Specialty of Baby Games



Review policy and info

Wery educational and fun for my baby. Edit: When he first started playing (11 months) he was mostly excited about balloon popping and all the colors and the cheers at the end of a session. He was able to drag some of the objects around, but I solved the puzzles for him. Now (14 months) he copies me,...



My 14 month old doesn't fully understand the games, but he still loves trying to play them. The one issue is that many of the games require you to tap and hold an object to start moving it, so, if he misses a little when trying to move an object, he can't simply slide his finger to

Figure 15: Reviews on Baby Games

REVIEWS

Updated	Size	Installs
March 10, 2022	62M	1,000,000+
Current Version	Requires Android	Content Rating
3.4	5.1 and up	Everyone
		Learn more
Interactive Elements	In-app Products	Permissions
In-Game Purchases	\$4.99 per item	View details
Danart	Offered By	Doveloper
Report	Offered By	Developer
Flag as inappropriate	Bebi Family: preschool	info@bebi.family
	learning games for kids	Privacy Policy
		Harju maakond, Tallinn,
		Kesklinna linnaosa,
		Sakala tn 7-2

Figure 16: Additional Information on Baby Games

1.1.5. Toddler Games for 2-3-Year-Old



Figure 17: Toddler Games 2–3-Year-Old

Toddler Games for 2–3-Year-Old is education game for kids of age group 2-5 years. Kidlo Toddler Games includes puzzles, popping bubble games, coloring, join the dots, dress up, match the pairs, sorting, tracing games and more. These games will boost cognitive skills, hand-eye coordination, concentration, and imagination of children (IDZ Digital Private Limited, 2022).

Kidlo Toddler Games is a fun educational app for 2 year olds and 3 year olds with 1000+ interactive games to play and learn easily. Begin your child's early learning journey with these exciting educational games!

Kidlo Toddler Games includes puzzles, popping bubble games, coloring, join the dots, dress up, match the pairs, sorting, tracing games and more. These games will **boost cognitive skills, hand-eye coordination, concentration, and imagination** of your children. You will be amazed to see how quickly your 2 year old or 3 year old toddler learns different things.

These games are a great way for you to have some fun learning time with your two year old. Watch your toddler complete these fun games while learning at the same time. It is filled with **cute, colorful graphics and funny animations** which encourage your three year old to learn shapes and colors easily.

★ Features of Kidlo Toddler Games are: ☆

These games are ideal for toddlers to learn animals, numbers, shapes, colors and much more!

Kid Friendly

All the educational games in this app are completely kid-friendly. 2 year old and 3 year old Toddlers can play them easily.

Different Categories

Choose from a wide range of game categories like Farm, Animals, Fun, Insects, Space, City, Marine, Vehicles and Birds.

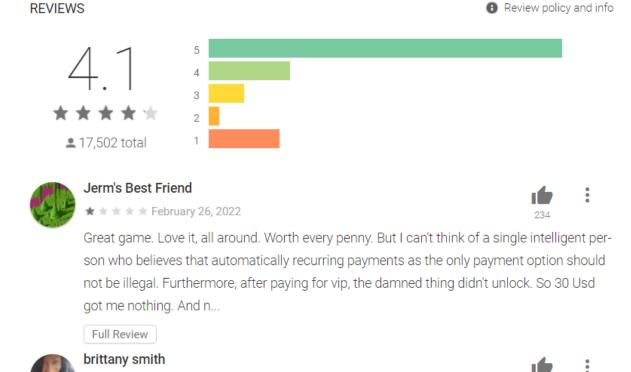
Available Offline & No Ads

These games can be played anytime and anywhere without internet. Completely ad-free.

Figure 18: Specialty of Toddler Games for 2-3-years old

Updated	Size	Installs
January 10, 2022	81M	10,000,000+
Current Version	Requires Android	Content Rating
3.9.9	3.0 and up	Everyone
		Learn more
Interactive Elements	In-app Products	Permissions
Digital Purchases	\$4.99 - \$29.99 per item	View details
Report	Offered By	Developer
Flag as inappropriate	IDZ Digital Private	Visit website
	Limited	support@kidlo.com
		Privacy Policy
		607, Western Edge II,
		Borivali (E), Mumbai
		400066, India

Figure 19: Additional Feature of Toddler games for age of 2-3 years old



I pay for the monthly subscription to access the additional games. Each month on the day that they charge me, I no longer have access to the paid games even though they've drafted my payment. I've sent several emails about this issue. This is getting to be ridiculous.



My child love this.-1 \bigstar because trace the line game is impossible for toodler. To complete it, u must add pressure and cannot leave the line even a bit, it will reset. How do you expect a toddler draw a nonstop line ???

Figure 20: Reviews on Toddler Game for 2-3-years old

★ ★ ★ ★ March 16, 2022

1.2. Comparison

1.2.1. Comparison between Similar Systems

All three games are educational games aimed at various age groups. They were all posted to the Play Store. Many people enjoy these games, and many of them have received great reviews. All of these games are developed by various companies and have different game ideas. Each one of these games has different educational component to it. All of the games are designed with the age range of children in consideration. Below is a comparison of the features of these games with my game:

Comparison List						
Features	My Game	Colors and Shapes Games	Masha and the Bear	Adventure Academy	Baby Game	Toddler Games
2D or 3D	2D	2D	2D	2D	2D	2D
For Age group	13 and above	2-6 years	3-7	8-12	2-4	2-5
Education	Newton's	Colors	Colors	Math,	Colors, shapes	Puzzles and
About	law of motion and Physics	and Shapes	and Items	Science and Grammar	and animals	colors
Mobile Application	No	Yes	Yes	Yes	Yes	Yes
Windows	Yes	No	No	No	No	No
Solo game	Yes	No	No	No	No	No
AI	Yes	No	No	No	No	No
Levels	Yes	Yes	Yes	Yes	Yes	Yes

Table 1: Comparison List Table

1.2.2. Conclusion from Similar System

Analyzing the similar the other similar application can reveal the result of the difference between the features application. All of the educational games mentioned above for comparison came from the Google Play store. They were highly rated by users, so I believe my application is just as useful as all of the applications mentioned above.

When compared to similar applications, my application has more and some additional unique features that make it more interesting.