Privacy Assignment - 4

Q1)

Major design decisions:

As a user myself , I would want the design to be easy to digest, simple and understandable. At the same time, it should also be catching eyes of the user and make them get the information. There can still be an entire Privacy Policy in detail for people who want to read in depth and understand more. I also wanted to include all the options mentioned under MPN and tried to include everything if possible (Since we are still keeping the traditional Privacy Policy page, not too sensitive information can be avoided in this mock up) and still not to be too much data). Briefly going over MPN:

It has 11 categories and can be described as follows :

1	Use: How we use your data internally
2	Share: How we share your data externally with other companies or entities
3	Sell: Who we sell your data to
4	Store: How we store your data
5	Encryption: How we encrypt your data
6	Privacy: How this technology accesses other data
7	User Options: What you can do with the data that we collect
8	Deactivation: What happens to your data when your account is deactivated
9	Policy Changes: How we will notify you if our privacy policy changes
10	Breach: How we will notify you and protect your data in case of an improper disclosure
11	Contact Us

Fields like Policy Changes, Breach are not that often needed and can be retained just with the regular Privacy Policy changes. Those details are needed only at times when a user particularly wants to know how will he know the policy changed, or when a breach happens and the user wants to know. The rest of the fields are used more often and need to be implemented in the mock up.

2) From the MPN categories mentioned above, I m categorizing the various ways a user sees this privacy notice. All the notices are based as pop-ups at various levels of usage of the app.

i) While downloading :

      A pop-up with Privacy of data is given.

            Will this technology or app request access to other device data or applications, such as your phone's camera, photos, or contacts?

            Does this technology or app allow you to share the collected data with your social media accounts, like Facebook?

            These questions of MPN are covered.

      Reason : In this way, the user can choose whether or not the permissions are ok/ not to continue with the app.

ii) While installing :
  A pop-up with info about policy changes/ breaches is given. In this way, the user is informed about the rare cases initially.
  Contact us details also can be included here and where it can be found.
  Reason: These are not needed often and occurs rarely, so it can just be notified once.

iii) While deactivating :
  The deactivating screen that asks for final confirmation can have how the data is handled after
  Reason: Giving the information only when it is needed

iii) While Using the app:
  When an user enters any data/ gives permission to access any data, a pop-up can describe what sort of data it is, how it is used/shared/sold/stored/encrypted, user options can be discussed.

3) The images are attached with the jar file split under each category above.

Q2)

Checklist :

S.No	Checklist	Reference to COPPA
1	Doesn't collect PI information from children that's deceptive	§312.3 Regulation of unfair or deceptive acts or practices in connection with the collection, use, and/or disclosure of personal information from and about children on the Internet.
2	Privacy Policy contains all list of operators that collect PI of children	§312.3(a) Provide notice on the Web site or online service of what information it collects from children, how it uses such information, and its disclosure practices for such information
3	Privacy Policy contains a description of the personal information collected and how it's used	§312.3(a) Provide notice on the Web site or online service of what information it collects from children, how it uses such information, and its disclosure practices for such information

| S.No	Checklist	Reference to COPPA
4	Obtain parental notice	§312.4 (a) It shall be the obligation of the operator to provide notice and obtain verifiable parental consent prior to collecting, using, or disclosing personal information from children. Such notice must be clearly and understandably written, complete, and must contain no unrelated, confusing, or contradictory materials.
5	Notify parents about the data collection and get their consent	§312.5 (a) An operator is required to obtain verifiable parental consent before any collection, use, or disclosure of personal information from children, including consent to any material change in the collection, use, or disclosure practices to which the parent has previously consented.
6	Notice on the Web site or online service	§312.4 (d) In addition to the direct notice to the parent, an operator must post a prominent and clearly labeled link to an online notice of its information practices with regard to children on the home or landing page or screen of its Web site or online service, and, at each area of the Web site or online service where personal information is collected from children. The link must be in close proximity to the requests for information in each such area.
7	Reasonable procedures to protect the security of kid's personal information.	§312.8 Confidentiality, security, and integrity of personal information collected from children.
8	Hold and use the data only for the required purposes and time	§312.10 Data retention and deletion requirements.
9	Respond to a child's specific request	§312.6 (a) Upon request of a parent whose child has provided personal information to a Web site or online service, the operator of that Web site or online service is required to provide to that parent

S.No	Checklist	Reference to COPPA
10	Don't collect extra data that's not needed in the form of game or another activity	§312.7 Prohibition against conditioning a child's participation on collection of personal information.An operator is prohibited from conditioning a child's participation in a game, the offering of a prize, or another activity on the child's disclosing more personal information than is reasonably necessary to participate in such activity.

2) & 3)

Rating A - best compliant with COPPA
Rating D - least compliant with COPPA

App 1: 123 Kids Fun Music Games Free
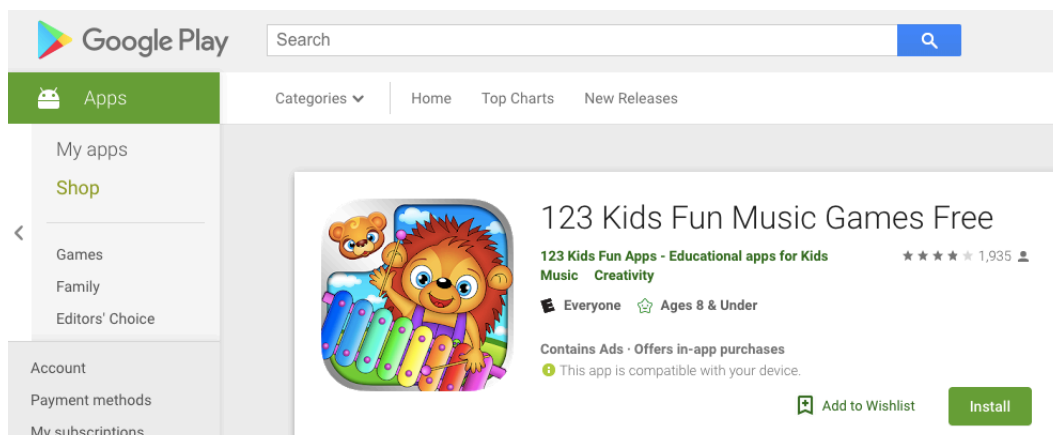
GOOGLE PLAY IMAGE OF THE APP

Link to Privacy Policy :
http://123kidsfun.com/privacy_policy/android/music-free-policy.html

Annotated policy :

123 Kids Fun Music Free (Android version)

We do not collect personally identifiable information. 1
We do not collect personally identifiable information about you. In other words, we do not collect information such as your name, address, phone number or email address.

4,5

We do not knowingly contact or collect personal information from children under 13. If you believe we have inadvertently collected such information, please contact us so we can promptly obtain parental consent or remove the information.

We do not store or share your precise location. 2
We do not use or collect your precise geographic location.

We don't share your personal information with marketers. 3
We do not share personally identifiable information (such as name, address, email or phone) with other companies for marketing purposes.

No ad companies collect data through our application.
We do not allow advertising companies to collect data through our application for ad targeting.

In-app purchases
There are in-app purchases in our application.

Push notifications
We use push notifications in our application. See company privacy policies below.

OneSignal
Our mission is to become the ubiquitous platform for all mobile and web notification messages that apps send to users, and we're well on our way. Full Privacy Policy: https://onesignal.com/tos

No Internet connection required
Application do not require an internet connection to work. However, the application contains links to external sites that require an internet connection.

External sites:
123 Kids Fun Apps - Link to our website - Full Privacy Policy: http://123kidsfun.com/privacy-policy.html
Facebook - Link to our fanpage on Facebook - Full Privacy Policy: https://www.facebook.com/about/privacy
Twitter - Link to our profile on Twitter - Full Privacy Policy: https://twitter.com/privacy
Google Play - Link to rating our app in the Google Play - Full Privacy Policy: http://www.google.com/intl/us/policies/privacy/

9

You can ask privacy questions.
If you have any questions or concerns about our privacy policies, please contact us: contact@123kidsfun.com

You can review more privacy-related information.
This privacy policy was last updated on [07.09.2017]. Our privacy policy may change from time to time. If we make any material changes to our policies, we will place them on our website or application.
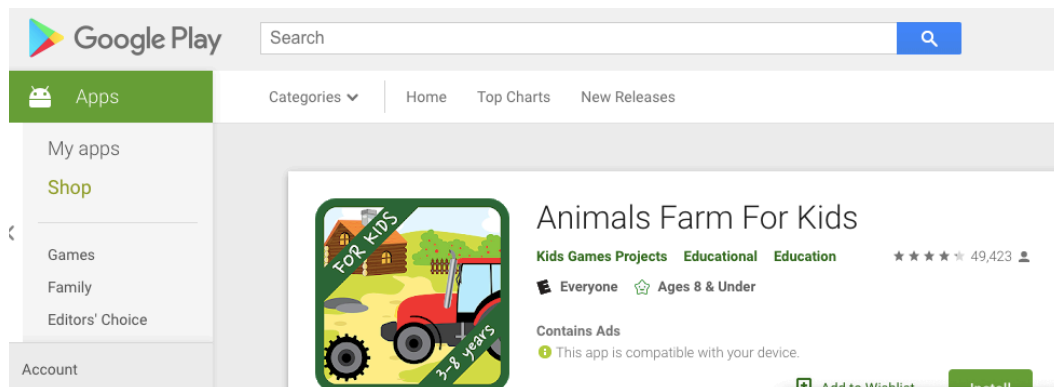
ANNOTATED POLICY OF APP1

The selected google app doesn't contain any information on the following checklists:

1) (6)There aren't any notice on the app/ website regarding the parental notice etc
2) (7) There isn't any information on how the data is transmitted or moved within the application and if it is safe
3) (8) No information about data retention policies
4) (10) is also not mentioned

Rest all are included as part of policies.
Rating can be C as they have tried to include most of what is in my checklist, but majorly missing out info on parental consent and data retention policies.

App - 2: Animals Farm for Kids

GOOGLE PLAY IMAGE OF APP2

Link to Privacy Policy :
http://kidsgamesprojects.com/privace-policy

Annotated list of rules complying:

Personal identification information

1

We may collect personal identification information from Users in a variety of ways in connection with activities, services, features or resources we make available on our Site. . Users may visit our Site anonymously. We will collect personal identification information from Users only if they voluntarily submit such information to us. Users can always refuse to supply personally identification information, except that it may prevent them from engaging in certain Site related activities.

Non-personal identification information   1,2

We may collect non-personal identification information about Users whenever they interact with our Site. Non-personal identification information may include the browser name, the type of computer and technical information about Users means of connection to our Site, such as the operating system and the Internet service providers utilized and other similar information.

Web browser cookies

Our Site may use "cookies" to enhance User experience. User's web browser places cookies on their hard drive for record-keeping purposes and sometimes to track information about them. User may choose to set their web browser to refuse cookies, or to alert you when cookies are being sent. If they do so, note that some parts of the Site may not function properly.

How we use collected information   3

Kids Games Projects may collect and use Users personal information for the following purposes:

- *To run and operate our Site*
  We may need your information display content on the Site correctly.
- *To send periodic emails*
  We may use the email address to send User information and updates pertaining to their order. It may also be used to respond to their inquiries, questions, and/or other requests.

APP2-1

How we protect your information 7,8

We adopt appropriate data collection, storage and processing practices and security measures to protect against unauthorized access, alteration, disclosure or destruction of your personal information, username, password, transaction information and data stored on our Site.

Sharing your personal information

We do not sell, trade, or rent Users personal identification information to others. We may share generic aggregated demographic information not linked to any personal identification information regarding visitors and users with our business partners, trusted affiliates and advertisers for the purposes outlined above.

We may share or sell information with third parties for marketing or other purposes.

Sharing your personal information

This Privacy Policy governs the manner in which Kids Games Projects collects, uses, maintains and discloses information collected from users (each, a "User") of the http://kidsgamesprojects.com website ("Site"). This privacy policy applies to the Site and all products and services offered by Kids Games Projects.

APP 2- 2

The app has included all the options on the checklist except for anything related to parental consent.

The following checklist weren't satisfied:

4) Obtain parental notice
5) Notify parents about the data collection and get their consent
6) Notice on the Web site or online service

Rating for the app - C . As nothing related to parental consents are involved in the policy and the entire list of PI information is not indicated clearly (Everywhere it says "We may collect some data .... ", but the exact data is not specified).
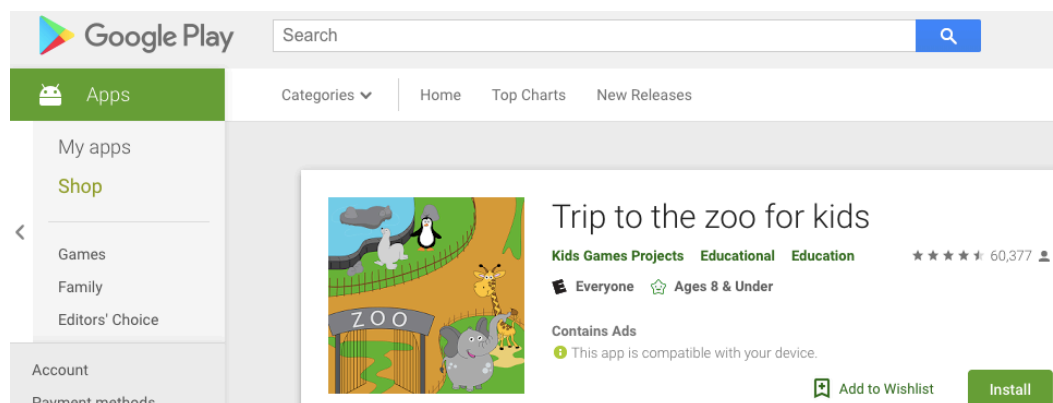
APP3

App - 3 : Trip to the Zoo for Kids

This app is by the same vendor as the previous app and the policies are the same. Policy is for the entire app developer and not for individual applications - This is not good as the permissions and the data collection may vary depending on app to app.

Link to Privacy Policy :
http://kidsgamesprojects.com/privace-policy

Annotated list of rules complying:

Personal identification information   1

We may collect personal identification information from Users in a variety of ways in connection with activities, services, features or resources we make available on our Site. . Users may visit our Site anonymously. We will collect personal identification information from Users only if they voluntarily submit such information to us. Users can always refuse to supply personally identification information, except that it may prevent them from engaging in certain Site related activities.

Non-personal identification information   1,2

We may collect non-personal identification information about Users whenever they interact with our Site. Non-personal identification information may include the browser name, the type of computer and technical information about Users means of connection to our Site, such as the operating system and the Internet service providers utilized and other similar information.

Web browser cookies

Our Site may use "cookies" to enhance User experience. User's web browser places cookies on their hard drive for record-keeping purposes and sometimes to track information about them. User may choose to set their web browser to refuse cookies, or to alert you when cookies are being sent. If they do so, note that some parts of the Site may not function properly.

How we use collected information   3

Kids Games Projects may collect and use Users personal information for the following purposes:

- *To run and operate our Site*
  We may need your information display content on the Site correctly.
- *To send periodic emails*
  We may use the email address to send User information and updates pertaining to their order. It may also be used to respond to their inquiries, questions, and/or other requests.

APP3-1

How we protect your information   7,8

We adopt appropriate data collection, storage and processing practices and security measures to protect against unauthorized access, alteration, disclosure or destruction of your personal information, username, password, transaction information and data stored on our Site.

Sharing your personal information

We do not sell, trade, or rent Users personal identification information to others. We may share generic aggregated demographic information not linked to any personal identification information regarding visitors and users with our business partners, trusted affiliates and advertisers for the purposes outlined above.

We may share or sell information with third parties for marketing or other purposes.

Sharing your personal information

This Privacy Policy governs the manner in which Kids Games Projects collects, uses, maintains and discloses information collected from users (each, a "User") of the http://kidsgamesprojects.com website ("Site"). This privacy policy applies to the Site and all products and services offered by Kids Games Projects.
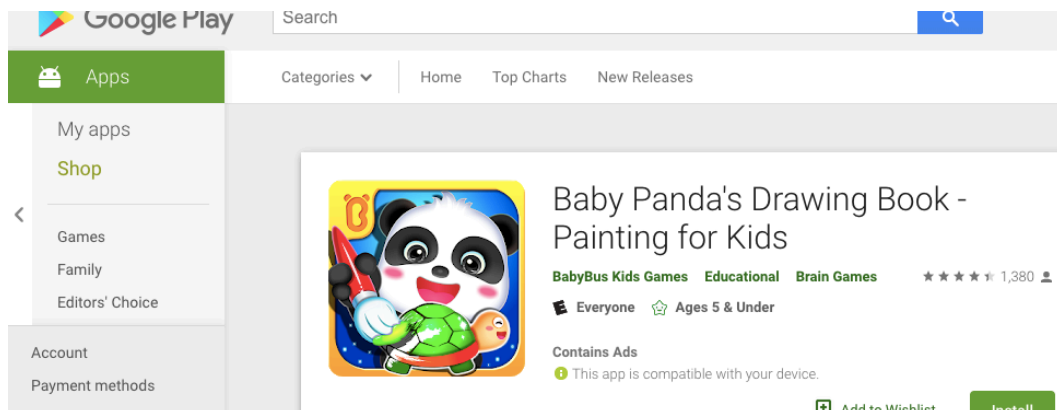
APP 3- 2

The app has included all the options on the checklist except for anything related to parental consent.

The following checklist weren't satisfied:

4) Obtain parental notice
5) Notify parents about the data collection and get their consent
6) Notice on the Web site or online service

Rating for the app - C . As nothing related to parental consents are involved in the policy and the entire list of PI information is not indicated clearly (Everywhere it says "We may collect some data .... ", but the exact data is not specified).

App-4: Baby Panda's Drawing Book - Painting for Kids

APP4

Link to Privacy Policy :

https://en.babybus.com/index/privacyPolicy.shtml
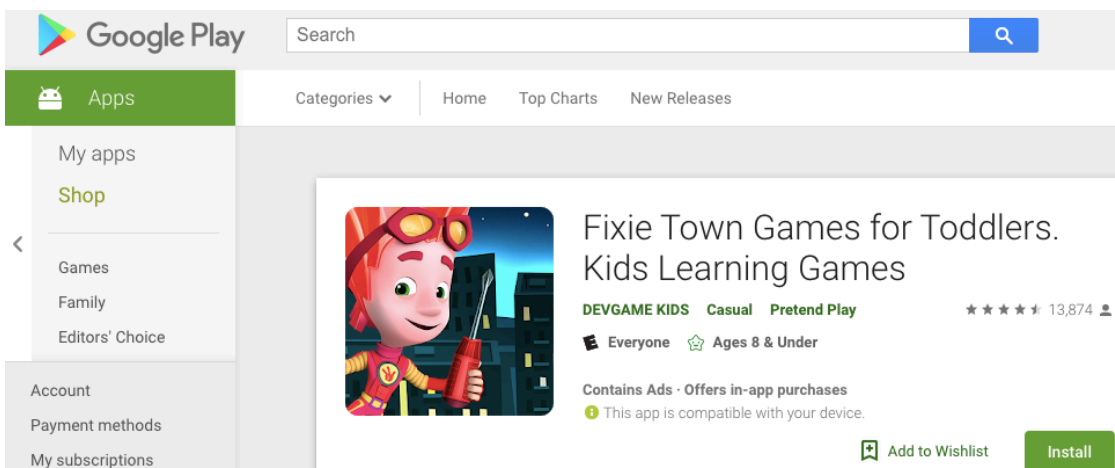
Annotated List:

APP 4

The policy is clear and abides all the points almost all the points on my checklist.
The only point that didn't check was
How are they notifying parents about the parental consents etc.

Rating given : B (as they have mentioned almost everything in COPPA, but missing little details)

APP-5: Fixie Town Games for Toddlers. Kids Learning Games

APP 5

Link to Privacy Policy :

https://devgameou.com/privacy-policy/

Annotated screenshots :

Personal identification information

1

We may collect personal identification information from Users in a variety of ways in connection with activities, services, features or resources we make available on our Site. . Users may visit our Site anonymously. We will collect personal identification information from Users only if they voluntarily submit such information to us. Users can always refuse to supply personally identification information, except that it may prevent them from engaging in certain Site related activities.

Non-personal identification information   1,2

We may collect non-personal identification information about Users whenever they interact with our Site. Non-personal identification information may include the browser name, the type of computer and technical information about Users means of connection to our Site, such as the operating system and the Internet service providers utilized and other similar information.

Web browser cookies

Our Site may use "cookies" to enhance User experience. User's web browser places cookies on their hard drive for record-keeping purposes and sometimes to track information about them. User may choose to set their web browser to refuse cookies, or to alert you when cookies are being sent. If they do so, note that some parts of the Site may not function properly.

How we use collected information   3

Kids Games Projects may collect and use Users personal information for the following purposes:

- *To run and operate our Site*
  We may need your information display content on the Site correctly.
- *To send periodic emails*
  We may use the email address to send User information and updates pertaining to their order. It may also be used to respond to their inquiries, questions, and/or other requests.

APP 5-1

About Verifiable Parental Consent:

Covers 4,5,6

Email Consent. In the event DEVGAME wishes to collect personal information from a child, COPPA requires that we first seek a parent or guardian's consent by email. In the email we will explain what information we are collecting, how we plan to use it, how the parent can provide consent, and how the parent can revoke consent. If we do not receive parental consent within a reasonable time, we will delete the parent contact information and any other information collected from the child in connection with that activity.

High-Level Consent. In the event DEVGAME collects personal information from a child that will be posted publicly, we will seek a higher level of consent than email consent. Such "high-level" methods of consent include but are not limited to asking for a credit card or other payment method for verification (with a nominal charge involved), speaking to a trained customer service representative by telephone or video chat, or requiring a signed consent form by mail, email attachment, or fax. After providing high-level consent, a parent may have the opportunity to use a pin or password in future communications as a way to confirm the parent's identity.

Teacher consent in lieu of a parent. With regard to school-based activities, COPPA allows teachers and school administrators to act in the stead of parents to provide consent for the collection of personal information from children. Schools should always notify parents about these activities. For more information on parental rights with respect to a child's educational record under the Family Educational Rights and Privacy Act (FERPA), please visit the FERPA site.

APP 5-2

Data retention

We will keep you information for as long as we need your data to allow you to use the Service, though generally no longer than 5 years.

Security

7,8

We have implemented commercially reasonable technical, physical, managerial and organizational measures designed to secure your personal information from accidental loss and from unauthorized access, use, alteration or disclosure. However, we cannot guarantee that unauthorized third parties will never be able to defeat those measures or use, disclose, or alter your personal information for improper purposes. Also please note that email and messaging systems are not considered secure, so we discourage you from sending us personal information through these mediums.

In the event that personal information has been or is compromised as a result of a breach of security, DEVGAME will promptly notify those persons whose personal information has been compromised, in accordance with the notification procedures set forth in this Policy, or as otherwise required by applicable law.

To protect your privacy and security, we may take reasonable measures (such as requiring a unique password) to verify your identity before permitting you access to your account or the Service. You are responsible to maintain the secrecy of your unique password and account information, and for controlling access to your email communication or interaction through the Site or DEVGAME's authorized social networking at all times.

Your rights and choices in relation to your personal information

Accessing, correcting, or deleting your personal information

DEVGAME takes your privacy seriously and works in a transparent way. In that sense, upon providing sufficient identification (to protect others' privacy), you can request information from us about the personal information we hold in relation to you and you can correct any inaccurate data we hold.

Furthermore, you can change or delete any personal information by changing the applicable information found in your DEVGAME account. However, by deleting the entirety of this information your account may become deactivated.
In certain territories (including the EU), you also have a legal right to ask for a restriction of processing, to object to processing as well as the right to data portability. However, these rights are subject to conditions and may not always be applicable.

APP 5-3

- conduct research and analysis to address the performance of our sites and applications
- generate anonymous reporting for use by DEVGAME

9,10

In the event we collect (or allow others to collect) such information from children on our sites and applications for other purposes, we will notify parents and obtain consent prior to such collection.

2. WHEN INFORMATION COLLECTED FROM CHILDREN IS AVAILABLE TO OTHERS

In addition to those rare instances where a child's personal information is posted publicly (after receiving high-level parental consent), we also may share or disclose personal information collected from children in a limited number of instances, including the following:

- We may share information with our service providers if necessary for them to perform a business, professional, or technology support function for us.
- We may disclose personal information if permitted or required by law, for example, in response to a court order or a subpoena. To the extent permitted by applicable law, we also may disclose personal information collected from children (i) in response to a law enforcement or public agency's (including schools or children services) request; (ii) if we believe disclosure may prevent the instigation of a crime, facilitate an investigation related to public safety or protect the safety of a child using our sites or applications; (iii) to protect the security or integrity of our sites, applications, and other technology, as well as the technology of our service providers; or (iv) enable us to take precautions against liability.

3. PARENTAL CHOICES AND CONTROLS

At any time, parents can refuse to permit us to collect further personal information from their children in association with a particular account, and can request that we delete from our records the personal information we have collected in connection with that account. Please keep in mind that a request to delete records may lead to a termination of an account, membership, or other service.

Where a child has registered for a DEVGAME account, we use one method to allow parents to access, change, or delete the personally identifiable information that we have collected from their children: Parents can contact us to request access to, change, or delete their child's personal information by sending an email to us at support@devgameou.com A valid request to delete personal information will be accommodated within a reasonable time.

APP 5- 4

This app ticked all the options on my checklist. The policy is longer than the others, but they clearly have specified all the details and mentioned about how they are compliant with COPPA and FERPA in detail.

Rating : A

3) Rating for the apps :

A detailed explanation of why I gave that rating is mentioned in each app's description.

The summary of the rating is given below :

S.no	App Name	Rating
1	123 Kids Fun Music Games Free	C
2	Animals Farm for Kids	C
3	Trip to the Zoo for Kids	C
4	Baby Panda's Drawing Book - Painting for Kids	B
5	Fixie Town Games for Toddlers. Kids Learning Games	A

4) Accuracy Report:

```
Prashanthis-MacBook-Air:wordnet prashanthikanniapanmurthy$ python3.7 wordnet3.py
File  0  Checklists found  {1, 2, 3, 4, 5, 6, 9}
File  1  Checklists found  {1, 2, 3, 6, 7, 8, 9, 10}
File  2  Checklists found  {1, 2, 3, 6, 7, 8, 9, 10}
File  3  Checklists found  {1, 2, 3, 6, 9, 10}
File  4  Checklists found  {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
Prashanthis-MacBook-Air:wordnet prashanthikanniapanmurthy$ 
```

CODE OUTPUT

App 1 :

    Manually annotated :

        Complied checklists : 1,2,3,4,5,9

    From Code:

        Complied checklist : 1,2,3,4,5,6,9

    Correctness from both lists (Accuracy) : 85%

App 2:

    Manually annotated :

        Complied checklists : 1,2,3,7,8,9,10

    From Code:

        Complied checklist : 1, 2, 3, 6, 7, 8, 9, 10

    Correctness from both lists (Accuracy) : 87.5%

App 3 :

    Manually annotated :

        Complied checklists : 1,2,3,7,8,9,10

    From Code:

        Complied checklist : 1, 2, 3, 6, 7, 8, 9, 10

    Correctness from both lists (Accuracy) : 87.5%

App 4 :

    Manually annotated :

        Complied checklists : 1,2,3,9,10

    From Code:

        Complied checklist : 1, 2, 3, 6, 9, 10

    Correctness from both lists (Accuracy) : 83%

App 5:

    Manually annotated :

        Complied checklists : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

    From Code:

        Complied checklist : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

    Correctness from both lists (Accuracy) : 100%

Average accuracy of the code: 88.6%

README For CODE:

1) Code takes input / output filenames as hardcoded
2) The checklists that are compiled for each file is printed on console
3) Annotation done as <<Checklist number(s) complied>>Line that complied