REPORT

Capacity Building Programme for Teacher Educators to Develop Mobile Applications relevant to the National Curriculum of Maldives

(31st January – 4th February 2016)

Venue: Seminar Room NIE, Ghazee Building 2nd Floor

Report Submitted by:

Ms. Rashmi Kathuria

CEMCA

NATIONAL
INSTITUTE OF
EDUCATION

**Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi
In collaboration with
National Institute of Education (NIE), Maldives**

Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi hosted a Capacity building workshop on Educational (Android) App Development Toolkit from 31 Jan 2016 to 4 Feb 2016 in collaboration with NIE, Republic of Maldives. Twenty five teacher educators from different parts of Maldives attended the workshop. Ms. Rashmi Kathuria, National ICT Awardee, PGT(Mathematics), Kulachi Hansraj Model School, Delhi, India facilitated this five days workshop along with Dr. Manas Ranjan Panigrahi, Programme Officer, CEMCA.The main objective of the capacity building programme was to equip them with skills of developing their own android apps as per the National curriculum. The workshop was designed to embed two elements viz. using App Inventor a cloud based platform for creating android mobile apps and open educational resources.

Day 1

The day started with recitation of Holy Quran, which was followed by a welcome address by Deputy Minister Ms. Na Heed, Republic of Maldives.

Dr. Manas Ranjan Panigrahi, Programme Officer, CEMCA briefed the participants about the programme and its objectives. Ms. Rashmi Kathuria, workshop facilitator, initiated the workshop with an ice breaking activity for motivating the participants and making them realise the need of the hour for teacher educators as change agents.

All participants were connected on a G+ community and shared with resources on cloud. They were introduced with visual programming. All participants created an account on MIT App Inventor and set up their Android devices for development and debugging. Participants were familiarised with the designer and block components through activities. They learnt about various new terms like QR Code, Emulator, Cloud Computing etc.

They were given a copy of tool kit and by the end of day one participants were able to do hands on with three activities viz. Activity 1[Text to Speech App: Loud Mouth], Activity 2 [AccelorometerSensor App] and Activity 3 [SpeechRecognizer App: Speak to Me]. Participants showed their enthusiasm in learning more.

Day 2

Ms. Rashmi began with the recap session followed by demonstration of Activity 4 [Canvas App: Scribble] and Activity 5 [Ball App: Ball Bounces] They were given a project work on Activity 6 [Orientation Sensor and Clock App: Move the Ball].

Throughout the day creative discussions happened on the use of various blocks and components for designing the apps. The concepts of image sprites, creation and calling procedures, setting up of global variables, arithmetic operators, logical and control components and tiny database were covered through activities designed.
Post Lunch session on OER was taken by Dr. Manas

Day 3
Ms. Rashmi began with the recap of previous days activities followed by demonstration and hands on sessions on Activity 7 [Camera App: Say Cheese!] and Activity 8 [Camcoder and VideoPlayer App: Action Capture] .

Participants were encouraged to use the tutorials from the tool kit to try making the apps on their own. By the end of day 3 they were able to finish three tutorials viz Pet the Kitty, Crystal Ball and Swat the mosquito.

Post Lunch Session on Open Licensing and Creative Common Licensing was taken by Dr. Manas.

Day 4

Dr. Manas began with a session on Searching of OER and Development of OER using OER-Common Platform which was followed by a session by Ms. Rashmi on creating educational resources using open source softwares. All the participants created quizzes and jigsaw puzzles. During the post lunch session participants were given information about how to package and distribute the apps.

They learnt to export/import .aia and.apk files. By the end of the day participants decided to develop their own apps. Some started making individually and some of them decided to work in small groups. It was heartening to see them working on their own app.

Day 5

Participants were excited as some of them could finish making their first android mobile app and some participants wanted to spend more time. Their problems were troubleshooted and by the end of pre-lunch all groups were ready for the show case. Participants were shared different resources

Valedictory session started at 3:00 pm with recitation of Holy Quran. Mr. Ahmed Shafeeu, Education Minister of State was the Chief Guest for the occasion. A brief report was read by the one of the participants. Deputy Minister Ms. Na Heed shared her experiences about the programme and its need in the current scenario of changing educational trends in Republic of Maldives. Some of the participants displayed their self-created android mobile apps which may be used for enhancing learning and creating interest of students. Dr. Manas and Ms. Rashmi shared their experiences of facilitating the workshop. In the chief guest address Mr. Ahmed appreciated the efforts of CEMCA and facilitators for achieving the desired goals. During his address he said children are digital natives and we as educators are immigrants. Our children can do multi-tasking using mobile technology. We need to know about the needs of 21st century learners and be prepared for educating them.

He said, we need to make the best use of tools and resources which are available. He appreciated the participants for their wonderful work done during the 5 days and congratulated the entire team of NIE for their efforts. Certificates were distributed by honourable minister to facilitators and all participants. The day ended on a positive note of exploring, learning and sharing and continuing the journey for the betterment of emerging societies.

Capacity Building Programme for Teacher Educators of NIE Maldives
to Develop Mobile Applications Relevant to the National Curriculum

31st January – 4th February 2016

Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi
In collaboration with
National Institute of Education (NIE), Maldives
Venue: Seminar Room NIE, Ghazee Building 2nd Floor

PROGRAMME SCHEDULE

Date	Time	Activities
Day 1 **Sunday** **31-01-2016**	*0830-0900*	**Opening Ceremony**
	0830-0835	∗ Recitation of Holy Quran
	0835-0850	∗ Welcome Address
	0850-0900	∗ Overview of the training by Dr. Manas Ranjan Panigrahi, CEMCA
	0930-1130	• Introduction of Participants • Icebreaking • Introduction to Visual Programming and MIT App Inventor Creating an App Inventor account • Android Device (Mobile/Tab) setup for App development and debugging
	1130-1145	Tea
	1145-1330	• Introduction to the development environment (designer and blocks editor) • Introduction to available modules for App development • Using basic components • Activity 1 [Text to Speech App: Loud Mouth] Demonstration + Hands on
	1330-1430	Lunch
	1430-1600	• Activity 2 [AccelorometerSensor App] Demo + Hands on • Activity 3 [SpeechRecognizer App: Speak to Me] Demonstration+ Hands On
Day 2 **Monday** **01-02-2016**	*0930-1130*	• Recap Day 1 • Activity 4 [Canvas App: Scribble] Demo + Hands on • Activity 5 [Ball App: Ball Bounces] Demo + Hands on
	1130-1145	Tea
	1145-1330	• Activity 6 [Orientation Sensor and Clock App: Move the Ball] Demo + Hands on
	1330-1430	Lunch
	1430-1600	Understanding of OER (Dr. Manas Ranjan)
Day 3	*0930-1130*	• Recap Day 2 • Activity 7 [Camera App: Say Cheese!] Demo

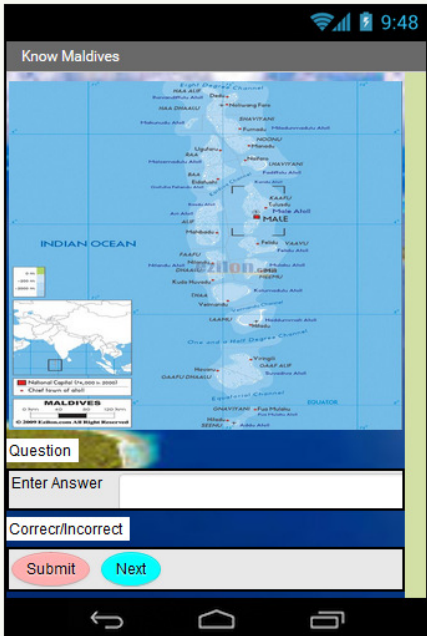|		
Tuesday *02-02-2016*		• Activity8 [Camcoder and VideoPlayer App: Action Capture] Demo • Tutorial 1: Pet the Kitty
	1130-1145	Tea
	1145-1330	Open Licensing and Creative Common Licensing (Dr. Manas Ranjan)
	1330-1430	Lunch
	1430-1600	• Tutorial 2: Crystal Ball • Tutorial 3: Swat the Mosquito • Q and A
Day 4 *Wednesday* *03-02-2016*	*0930-1130*	Searching of OER and Development of OER using OER-Common Platform (Dr. Manas Ranjan)
	1130-1145	Tea

	1145-1330	• Recap Day 3
		• Using advanced concepts:
		  1. Built-in Blocks, 2. Functions, 3. Variables
		• Using advanced concepts:
		  4. Arithmetic and Boolean Algebra, 5. Control Structures
		• Using advanced concepts:
		  6. Exception Handling
		• Using advanced concepts:
		   7. Starting Activities, 8. Databases and Storage
		• Using advanced concepts:
		   9. Connectivity, 10. Block Management

	1330-1430	Lunch
	1430-1600	• Recap Day 4 • Tutorial 5: Tweet my Homework • Packaging and distribution • Storyboards and prototypes
Day 5 *Thursday* *04-02-2016*	*0930-1130*	• Recap Day 4 • Tutorial 4: Virtual Chemistry Experiments • Tutorial 5: Tweet my Homework
	1130-1145	Tea
	1145-1330	• Publishing Apps on Google Play • Tutorial 6: Voice Note • Q & A
	1330-1430	Lunch
	1430-1530	Plan of Action with Participants (Dr. Manas Ranjan and Ms. Rashmi Kathuria)
	1530-1600	**Closing Ceremony**
		Way Forward Certificate Awarding Vote of Thanks

List of Participants

http://bit.ly/1m6Gr7X

Name of the participant	Feedback - What did I learn?
Mohamed Arif	**Day 1 31.01.2016** **to add buttons to the viewer** **there are 4 main components in mit app inventor.** **the importance of fast internet connections.** **technology related terminologies** **speech to text is done** **learnt to create speech recognition app** **accelerometer Sensor app is done** **Day 2 1.02.2016** **Today I am unable to follow because of slow internet** **learnt canvas and importance of it** **importance of palette in completing the mobile app** **Day 3, 2.02.2016** **I was able to follow simple steps of mobile app** **I have completed three tutorial which is swat the mosquito,dice and scan n learn** **Day 4** **created a document in OER** **learn to make teaching materials with some free softwares** **eclipsecrossword is used to make a crossword puzzle** **formulatortersia is used to make a matching worksheet** **http://mathematicslearning.blogspot.in/ is shared with us.** **created an account on OER** **All open source are not free .aia files are workable files** **Day 5** **Finish the quiz app based on new curriculum** **Have you created a new app? If yes, please share about it.** **yes. The app is a quiz about the new curriculum.** **About the Resource Persons:** **This workshop is a fruitful workshop for me. Teacher helped me to create different apps. I want learn more from teacher about the apps. Still I am unable to create a good app.** **Lots of informations were shared with us by two facilitators regarding OER and mobile app development.** **I want develop an app to check the distance of the islands of Baa atoll and the school enrolment of teachers and students.** **Atlast! Now I will be able to create simple mobile apps.**

Asiyath Sama 	**Day 1 31.01.2016** **difference between creativity and innovation** **about "bitly"** **-text to speech app** **-accelerometer sensor app** **-speech recognizer app** **Day 2 01.02.2016** **-Learnt about google+ community and joined Teachers matter community which is very interesting** **-canvas app** **-ball and image sprite app** **Day 3 02.01.2016** **learnt about** **- camera app** **-camcorder and video player** **-also got a clear picture of how to create blocks** **-swat the mosquito app** **-dice app** **-also learnt about creative commons** **Day 4 03.01.2016** **Learnt about** **-**
 Mohamed adly	**Day 1** **Learnt about getting started on apps inventor and also using qr code to access apps inventor.** **Learnt to make simple apps using apps inventor** **Learnt the importance of good internet connection for teaching and learning** **Blocks coding is useful for making apps** **Was able to create text to speech, accelerometer and speech recogniser app using app inventor** **Day2** **Learnt to use google+ community** **Developed Canvas join the dots app using apps inventor but couldn't get it to work because of slow internet connection.** **Tried using apps inventor** **Ball Image** **Learn about OER** **Day 3**

	Tried using apps inventor to create
	Pet the kitty
	Camera Say cheese
	Camcorder Action picture
	Swat the mosquito
	Dice
	In the afternoon we learnt about Creative Commons
	
	Day 4
	Used OERcommons org website to publish materials according to creative commons features
	
	Learnt free software, after downloading no internet is required)
	    ● **Crossword puzzle maker**
	    ● **Formulator Tarsia**
	    ● **Wordle**
	Learnt about exporting and importing files of App Inventor
	Developing a new app using app inventor
	
	Day 5
	Developing a new app using app inventor
	Making a quiz about Maldives "Know Maldives" from Group 4
	
	Making a quiz about Solar System
	
	About the Resource Persons:
	Rashmi madam and Manas Sir as our facilitator has done an excellent job in teaching us about google tools, app inventor, OER and other useful resources for teaching and learning. With the knowledge acquired hope to develop more resources in the future and share them freely with teachers and educators.

Ahmed Anwar	**Day 1 31.01.2016** **Learnt how to get started with developing android apps.** **Technological terminologies** **The use of bit.ly**

	learnt to create apps: - **Text to Speech** - **accelerometer sensor (stop shaking me)** - **speech recogniser** **Day 2 1.02.2016** **Morning** - **Google communities** - **Canvas** - **Ball and image sprite app** **Afternoon** - **Understanding OER** **Day 3 2.02.2016** **Morning** - **Camera app** - **Camcorder & video player app** - **Pet the kitty app** - **swat the mosqito** - **dice** **afternoon** - **OER commons** **Day 4 3.02.2016** **Morning** - **published docs in OER** - **Open source softwares for educational purposes;eclipse crossword, formulator tarsia, wordle.** **Afternoon** - **exporting .aia files for further development** - **importing .aia files from PC & other sources** **Day 5** (04.02.2016) **Morning** - working on group app **Have you created a new app? If yes, please share about it.** **No. We are creating an app in our group** **About the Resource Persons:** - **we are privileged to have Rashmi madam and Manas Sir as our facilitator. we learnt a lot about creating android apps and OER system from them. despite the barriers of limited time and slow internet connection Rashmi madam did a great job in teaching how to create simple mobile apps. would like to get an opportunity to learn more about app development from her in a place with better internet connection. my heartfelt gratitude to Rashmi Madam and Manas Sir. :D**
Soodha	**Day 1, 31.01.2016** **learnt about;** - **the different terminologies of technology** - **the importance of APP** - **technology is not that complicated** - **MIT AI2** - **Emulator**

- how to shorten the complicated URL links (bitly)

POST LUNCH
- same wifi connection is essential for testing
- significance of QR code
- Accelorometer sensor App
- Text to Speech App
- Speech Recogniser App

Day 2, 01.02.2016
- google community
- canvas App
- Ball and Sprite App

POST LUNCH
- knowledge is free but information is not
- OER
- epathshala
- khanacademy

Homework
- tried several times but unable to perform no 21 (couldnt put horizontal arrangement 3 & 4 into horizontal arrangement 5)

Day 3, 02/02/2016
- camera say cheese App
- Camcoder and videoplayer App
- Pet the kitty App
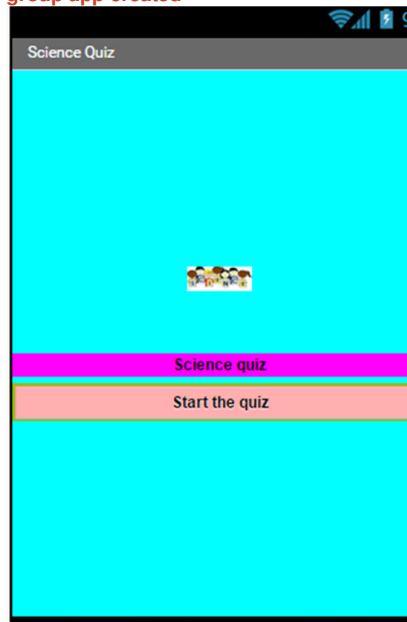- Swat the Mosquito App
- Dice App

Day 4, 03/02/2016
- exploring OER commons
- experience some free open source softwares useful for teaching
- eclipsecrossword
- FORMULATOR TARSIA
- WORDLE.NET

Post lunch
- Packaging and distribution
- how to share the app with others
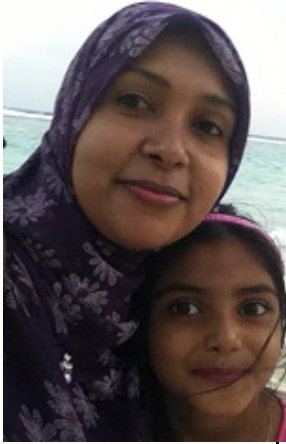- exporting importing .aia and .apk files
-

Day 5
- group app created

-

About the Resource Persons:

	It's a pleasure to have Rashmi ma'am and Manas sir as our facilitators. we have learnt a lot about android apps. we also came to know about OER and many more platforms where we can get resources as well as share ours. our facilitators are very friendly and helpful and encourage us to create our own apps.

Aminath Abdulla	**Day 1 (31.01.2016)**
	 pre lunch
	 i have leant how to create google forms
	 - four main components in mit ai2
	 - get to know speech recognizer components
	 post lunch
	 - accelerometer sensor app
	 - text to speech app
	
	 Day2 (01.02.2016)
	 pre-lunch
	 joined to google + communication
	 - introduced myself
	 - get familiar with canvas- join the dots
	 - ball and image sprite - move the ball
	 post-lunch
	 - Get familiar with Open Educational Resources
	
	 Day3 (02.02.2016)
	 pre-lunch
	 Create application
	 - camera
	 - action capture
	 - pet the kitty
	 - swat the mosquito
	 post-lunch
	 - dice
	 - scan and learn
	 - get to know about **Copyright and Open Licensing**
	
	 Day 4 (03.02.2016)
	 pre-lunch
	 - searching of OER and development of OER using - Common platform
	 - register to the platform and get familiar with it
	 - use some free application to create materials
	     - formulate tasia
	     - eclps cross word puzzle
	     - wordle.net
	 - get amazed with madam's work
	 post-lunch
	 - learn to share app
	 - started to create own apps
	 - leant how to save and open apps
	
	 Day 5 (04.02.2016)
	 Finish group app
	
	 Have you created a new app? If yes, please share about it.
	 No. We are creating an app in our group
	
	 About the Resource Persons:

Adhila	**Day 1** **Various terminologies of technology** **Idea of how to create an android application** **MIT Appinventor** **Google form** **text to speech**

	speech to text **Day2;** **Canvas** **Ball and Image sprite app** **Day 3:** **OER** **Pet the kitten** **Swat the mosquito** **Dice** **Copyright and open licensing** **Day 4:** **Open resources and blogs** **Crossword puzzle** **Formulator Tarsia** **Mathematics teaching ideas** **Packaging and distribution** **Day: Making own app but unable to do it coz my machine is not working** **Trainers:** **Both the trainers are very good and I like all the sessions taken by Rashmi ma'am. It inspired me a lot and gave ample ideas to be a better teacher educator.**
Aishath Shibana	**Day 1:Open MIT App inventor and get familiar with design and block editor. Able to add a text box, buttons and text speech, media components, accelorometerSensor and speech recognizer to the interface.** **Day 2: able to use canvas component .** **Day 3: able to use camera component, Camcoder component, videoPlayer component, image sprites, clock component, and add image, sound and touch vibration to the app.** **Understood the benefits of OER and identify the different licenses under creative commons** **Day 4: Completed OER online course, Create my own OER and publish it , learn interesting educational software,(cross word maker, wordle, and tarsia)** **Got really inspired by Rashmi madam's excellent contribution to the education.** **Day 5:Developed an App on my own through lot of trouble shooting. Finally it came up beautifully. With more practice and better internet speed I m confident in developing a better one.**
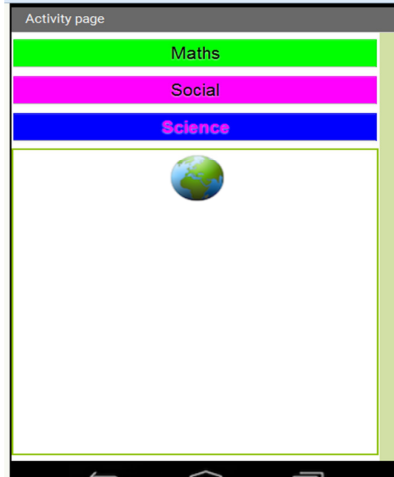
This app is called My Activity Page.
The objectives of this App is to practice different subjects through online interactive games. Different educational websites relating to the curriculum are linked to this App. Once the subject button is hit , it will take the students to the webpage.

Thank you Rashmi mam' for the support. I appreciate the way you choose to support me when i had a problem in viewing my app. A great teacher indeed!

Thank you Dr. Manas for helping me to create my own OER which was like a dream coming true. I will be waiting for your response regarding publishing of my research paper on OER in Maldives.

Ibrahim Rasheed

Day 1
got an idea of preparing simpler android application like text to speech.
understood the logic and concept of creating android apps which is easier than i thought earlier.
A12 software is user friendly

Day 2
Learnt how to prepare apps using canvas
more advanced features of creating apps such as image sprite, etc.
used google community to collaborate with others

Day 3
created media embedded apps using camera and media player
created an app using dice
**OER**

Day 4
Open software - making crossword puzzle
Worksheet preparation

Day 5
I could not complete the app due to slow internet connection. I also could not fix the screen size to my mobile. When i tested the app in my mobile the interface is different from what I see in my lap.
I tried to create the app where students could learn dhivehi alphabet

along with the pictures.

I have completed all the projects and tutorials but unfortunately some of the work did not work properly. They need more correction on developing screen.

This is what I could develop so far.
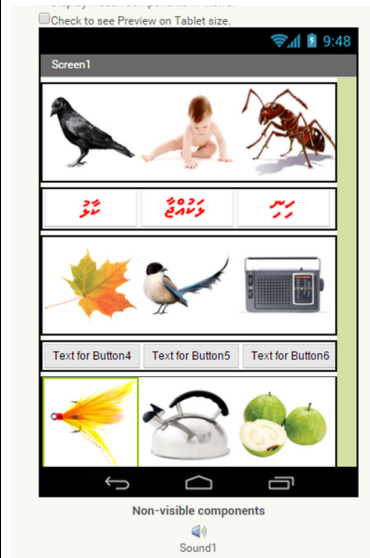
Finally done with the interesting sounds. Thank you Jawad sir for recording your lovely voice in my mobile app. :)

About the resource person
I am really glad to be here in this training. I didn't expect such a knowledgeable, interesting and fruitful sessions from our teacher Ms. Rashmi. She is hardworking, energetic and friendly teacher. She is prepared so well for the sessions and we gained much information from her. I really satisfied being in her class and look forward for the another opportunity to do the second part of the training. Due to lack of time we could not complete all the work well. Hopefully we will meet soon in another training. THANK YOU MADAM

Mohamed Abdullah

Day 1, 31 Jan 2016
to make 3 simple android apps:
speech to text,
text to speech and
accelerometer sensor.

Day 2, 1 Feb 2016
Canvas (Join the dots)
google+ community and joined Teachers matter community which is very interesting
-ball and image sprite app

Day 3, 2 Feb 2016
- camera app
- camcoder and video player
- how to create blocks

	Day 4, 3 Feb 2016 **Creative commons: Open resources and blogs** **Crossword puzzle** **Formulator Tarsia** **Mathematics teaching ideas** **Post lunch** **exporting .aia files** **importing .aia files** **writing story board for developing own app.** **Day 5, 4 Feb 2016** **Developed a simple app, still modifying it.** **About the Resource Persons:** **Ms. Rashmi, thank you very much for coming to Maldives and taking interesting sessions for us. We have learnt plenty from you, beyond our expectation. You are a great facilitator.**
Adeeb	**Day 1 (31.01.2016)** **Importance of good internet connection to use oPEN MIT AI2.** **Day 2 (01.02.2016)** **The 2nd at 1025 I was able to get into the MIT site and now trying to cover my missing lessons. Hope it will come up with me in the end.** **It is our interest to these things that brings us here at the first day itself, and it is growing day by day.** **Day 3 02.01.2016** **learnt about** **- camera app** **-camcoder and video player** **-also got a clear picture of how to create blocks** **-swat the mosquito app** **-dice app** **-also learnt about creative commons** **Day 4 03.01.2016** OERcommon - Create an account in OERcommon how to publish documents with creative common features. Understand the importance of following softwares and how to use it effectively in the classrooms Eclipse crossword – make crossword Free. Downloadable Can use it after installing without internet Formulator Tersia Domino's, worksheet Wordle www.wordle.net got a very details idea of how to use a blog effectively to disseminate teaching and learning ideas online.

	Afternoon the most important part of uploading and downloading appinventor files. different files types (.aia) and .apk file) Here is my blog url http://villadb.blogspot.com/p/main-page.html #teachers_DOES_matter **DAY 5 - working on my app, a taking number display in mother language, which can be use in Keystage 1** **About the Resource Persons:** रश्मि के रूप में वह अपार ज्ञान और अनुभव है जो हमें इस स्पेक्ट्रम में आगे जाने के लिए मदद करता है वह, जवाहरात हम अपने तकनीकी दुनिया के निर्माण में मिल गया में से एक है। महोदय, आप कॉपीराइट कानून द्वारा पकड़ा जा रहा से बचने के लिए हमें मदद करते हैं। यह वास्तव में एक महत्वपूर्ण सत्र है। **Rashmi** **She is one of the gems we got in building our ICT world, as she has immense knowledge and experience which helps us to go forward in this spectrum.** **Sir, you help us to escape from being caught by the copyright laws. It's really an important sessions.**
Ismail Naseer	***Day1. (31-1-2016)*** **Got opportunity to experience:** **--Accelorometer sensor App** **- -Dictation App** ***Day 2 1.02.2016*** **Morning** - **Google communities** - **Canvas** - **Ball and image sprite app** *Afternoon* - **Understanding OER** ***Day 3 2.02.2016*** *Morning* ● **Camera (Say Cheese) app** ● **Camcorder & video player (Action Capture) app** ● **Pet the kitty app** ● **Swat the Mosquito app** ● **Dice app** *Afternoon*

	● **Scan and Learn**
	Day 4 3.02.2016 *Morning* ● **OER Commons (created an account)** ● **Eclipse Crossword.** **(free software, after downloading no internet is required)** ● **Formulator Tarsia (has got free licensing)** ● **Wordle** **Afternoon** ● **exporting .aia files for further development** ● **importing .aia files from PC & other sources** **Day 5:** **About the Resource Persons:** *Ms. Rashmi Kathuria,* *We appreciate your hard work . You really enhance our knowledge and experience about mobile apps. We got hands on minds on experience here in this workshop.* *Sir: Your sessions were really very informative. Thank you sir.*
Abdul Rasheed	**learn to make android application to use in teachingd** **day 2** **do some exercises on MIT appinventors but unable to complete it because of slow internet connection,** **trying to follow on the manual** **day 3** - **google community** - **canvas App** - **Ball and Sprite App** - **Camera (Say Cheese) app** - **Camcorder & video player (Action Capture) app** - **Pet the kitty app** - **Swat the Mosquito app** **Day 4** - **create own application using a software** - **Day 5 Ab**
Aniyath	**Day1: 31st January 2016** **Terminologies** **some apps hands on experience** ● **AccelorometerSensor App** ● **SpeechRecognizer App** ● **exploring texttospeech App** **AI2 user interface,palette,viewer,components,properties getting familiar** **Day2:1st February 2016**

- **Canvas App (jointhedots) activity**
- **Ballandsprite App**
- **The google plus community**

Post Lunch
- **understanding open educational Resources**
- **difference between knowledge and information**
- **exploring call a friend App**

day3:2nd February 2016
- **camera say cheese App**
- **Camcoder and videoplayer App**
- **Pet the kitty App**
- **Swat the Mosquito App**
- **Dice App**

Day 4
exploring OER commons
experience some free open source softwares useful for teaching
eclipsecrossword
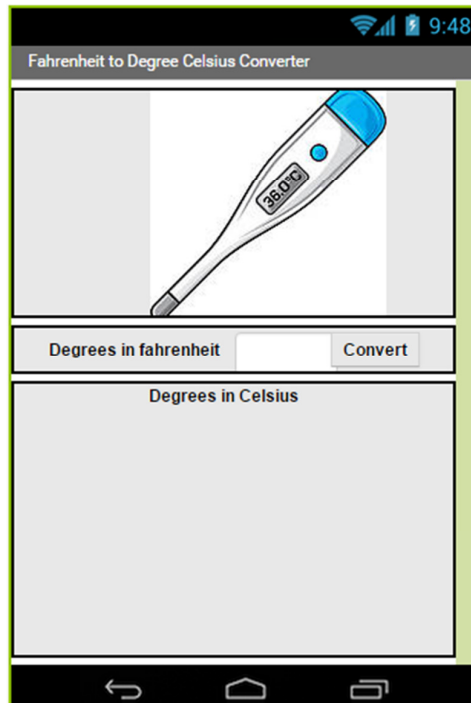**FORMULATOR TARSIA**
WORDLE.NET

Post lunch
Packaging and distribution
- **how to share the app with others**
 exporting importing .aia and .apk files

Day 5
created owns apps temperature converter..

About the Resource Persons:

	I am really glad to be part of this training. The sessions we had with the two experts from commonwealth of learning were very fruitful experiences. Especially I want appreciate a lot about the hands on experiences guided and the shared experiences of the facilitator Ms Rashmi. Her tremendous works is so inspiring and strike me as enthusiastic and passionate more about this profession.
Shiuny	**DAY 1** - **Different terms like Emulator accelerometerSensor app** - **MIT A12** - **A12 starter** - **Text to Speech** - **AccelerometerSensor** - **Speechrecognizer** - **DAY 2** - **project 4 and project 5 (Canvas and Ball and imageSprite** - **Ball and ImageSprite** - **call a friend** **DAY 3** - **Camera** - **Camcoder and video player** - **Tutorial1,2,3,4,5,7,8** **DAY 4** - **packaging and distribution** - **publishing apps on Google Play** - **Eclipse crosswords** **DAY 5** - **About the Resource Persons:**
Aishath Zaeema	**Day1: 31st January 2016** 1. **Text to speech app** 2. **Google forms** 3. **Speech recognizer app** 4. **MIT app inventor** 5. **AccelorometerSensor app** **Day2: 1st February 2016** **I learned how to create Canvas App** **Join the Dots** **Ball and Image Sprite** **Day 3: 2nd February 2016** **Pet the kitty** **Swat the Mosquito** **Scan & Learn** **Day 4:** **Exploring importing & exporting .aia &.apk files** **Open software** **Exploring OER** **Eclipse Crossword puzzles**

	Day 5 (04.02.2016) **Today I learnt and creating new app.** **How to make aia. and apk. files** **Have you created a new app? If yes, please share about it.** **Yes! Rashmi miss. Wooooooow.** **It was a great opportunity exploring new ideas and new thoughts. My new App leads to Universal Design of Learning (UDL). And this App will use Assessment for learning (AFL). Especially for those who are Exceptional learners.** **About the Resource Persons:** **Ms. Rashmi - Best Teacher, Inspiring, Innovative Facilitator, very good role model.** **Mr. Manas is a Good leader, promoting OER.**
Ali Jawad	**Day 1** **I found a very easy and effective way to use technology in classroom.**

	Learned very easy way to develop simple android applications **Day 2** **I learned and explored google community which is very important tool for teachers** **Learned how to develop simple android application using canvas and other objects. Manipulating images and moving ball** **Learned importance OER uses** **the importance of knowledge and some other educational resources** **Day 3** **In android programing I was able to do more confidently** **Learned Camcorder and video** **Also knew different type of copyrights OER** **Day4** **Before Lunch** **How to create and publish OER online** **Some educational tools to develop puzzles. cross word and so on** **After Lunch** **Learned how to import and export projects from apple inventors.** **Got more techniques how develop mobile application.** **How to design a project.** **Day 5** **Leaned video conference by using google hangout** **developed capacity to develop apps** ## About the Resource Persons: **Both Facilitator from commonwealth of learning share with me great knowledge. The tool I have learned to develop mobile application is very much relevant to one of the key competency of national curriculum, using media and technology. i can say this is very useful workshop. the way it was delivered is very easy to grasp me. The best characteristic of both facilitators are very kind and friendly.**
Ziuna Hussain 	**Day 1 31.01.2016** **First day of the workshop was quite interesting. The sessions were very informative and hands on activities helped me to grasp the concept of developing android mobile apps using MIT app inventor. App Inventor is a simple programming tool for building Android apps. Being a novice in developing apps my first thought was 'I can't do it'. But the first sessions proved me wrong. Mr.Rashmi Kathuria, our trainer explained and demonstrated it so well that I started understating the logic behind developing apps.** **First I created an App Inventor account.App Inventor 2 uses google for authentication.** **The first app that I developed was TextToSpeech.This app speaks out text typed into the TextToSpeech using the TextToSpeech component.After creating I did live testing. I couldn't believe what I saw. It worked! this motivated me to try new apps. Then I tried another two apps called AccelerometerSensor,and SpeechRecodnizer . I was able to use AccelerometerSensor to detect phone movement. When I shook the phone it spoke to me**

and asked to stop shaking me. First day ended with so many new learning experiences.

Day 2 01.02.2016
Second day of the training began talking about Google community. Then I learned to work with two apps. The first one was Canvas (join the dots) which allows to draw a picture by joining the dots on a Canvas component. and the other app was Ball and ImageSprite (move the ball).This app uses a ball and an ImageSprrite to stimulate a golf game. While practicing I learned about a component called "Canvas" which is found under the drawing and Animation drawer of Palette. This is the component that facilitates creative aspects of an app, including game design.

The session after the lunch was about Open Educational Resources (OER). I learned about the concept of OER and different technology platforms.
   1. knowledge and information
   2. Defining the 'open' in open content
   3. OER commons
   4. Scan and learn

Day 3 02.02.2016
Before lunch
   1. Pet the kitty
   2. Camera Say cheese
   3. Camcorder Action picture
   4. Swat the mosquito
   5. Dice

After lunch
   1. Learned more about OER and
   2. Copyright and open licensing

Day 4 03.02.2016
Before lunch
   1. How to create an account in creative commons
   2. Eclipse Crossword-a free educational software
   3. Formulator Tarsia
   4. Wordle

After lunch
   1. Worked on creating our own apps
   2. Learned about packaging and distributing; how to change apps to aia. files and apk. files
   3. Learned how to import and export files from app inventor to my desktop

Day 5:
About the Resource Persons:
The facilitators of the workshop were **Dr.Manas Ranjan** and **Ms.Rashmi Kathuria. The sessions taken by Dr.manas were focused on understanding Open Educational Resources (OER). These sessions were very informative and useful where we explored OER in general.**
We were introduced to mobile apps by **Ms.Rashmi Kathuria. Indeed an inspiration for all the teachers. Her creative and innovative teaching pedagogies helped me to understand the concept behind developing mobile apps. She is an exceptional teacher. I think teachers like you should be immortalized. It was a pleasure learning from an award winning teacher. If I am able to appreciate #teachersmatter. :)**

Fathimath Shifaza	**Day 1**
	.Very interesting training.
	.Learnt new words related to computer technology.
	.Learnt to create three applications
	    1. **Text to Speech (Loud Mouth)**
	This app speaks out the text typed into the TextBox using the Text To Speech component.
	    2. **AccelorometerSensor (Stop Shaking me)**
	This app uses the AccelormeterSensor to detect if the phone is moving or shaking. When you shake the phone it will ask you to stop shaking it.
	    3. **Speech Recognizer (Dictation)**
	This app uses the SpeechRecognizer component to take dictation from you.
	
	.Also, learnt how to shorten urls.
	.Learnt about MIT Ai2 Companion application. It is a blocks-based programming tool that allows even novices to start programming and building fully functional apps for Android devices.
	.Five main Objectives of MIT app inventor includes:
	    1. **Sustaining and enhancing the tool**
	    2. **Building enterprise enhancements**
	    3. **Building capacity**
	    4. **Promoting computer science education**
	    5. **Conducting and supporting community research**
	.We also Downloaded Emulator to my laptop. We can test the app created in real time on our computers in real time using emulators.
	
	Day 2
	Pre- lunch:
	learnt Google plus Community
	Joined Teachers Community
	learnt how to do:
	    1. **Activity 4 - Join the Dots**
	This app allows us to draw a picture by joining the dots on a Canvas component
	    2. **Activity 5 - Move the Ball**
	This app allows us to draw a picture by joining the dots on a Canvas component.
	
	Post lunch:
	. OER - Open Educational Resources are digital materials that can be re-used for teaching, learning, research and more, made available free through open licenses, which allow uses of the materials that would not be easily permitted under copyright alone.
	. Difference between knowledge and information
	. epathshala app
	. Khan Academy
	
	Day 3
	Pre-lunch
	Learnt how to do:
	      - Tutorial 1 : Pet the kitty app
	This is a virtual pet application. An image of a cat appears in the centre of the screen and makes a purring sound when stroked with a finger. In addition, the phone vibrates to the purring sound.

- Tutorial 2 : Swat the mosquito
This is an interactive game. The objective is to swat the mosquito with your finger. The mosquito flies randomly on the screen and the phone vibrates as the mosquito flies. When we swat the mosquito the game will say "Hit" and our score will increase by +1. We can reset the score to start a new game.

- Tutorial 3 : Dice
This app can be used as a replacement for a physical dice when playing board games such as Snakes and Ladders. Swing the phone to roll the dice. The app will speak out the number you have rolled.

- Tutorial 5 : Scan and Learn
This app uses the BarcodeScanner and ActivityStarter components. We can press and hold to scan a barcode or QR code. The activity starter will open the content URL using the appropriate applications installed on your device.

Post Lunch:
- **OER**
- **Copyright**

Copyright is an exclusive, transferable right given by law to a creator or author for a fixed number of years to copy, print, publish, perform, film, record.
- **Licensing**

Copyright laws come with a licensing clause that gives authors the right to license their work for reuse.

Day 4
Pre- Lunch
- **OER Commons (created an account)**

Open Educational Resources are teaching and learning materials that can be freely used or reused, without charge.
- **Eclipse Crossword** (free software, after downloading no internet is required)
- **Formulator Tarsia (has got free licensing)**
- **Wordle**

Post Lunch
- **started creating our own apps**
- **learnt about Packaging and distribution**
- **aia files** *(aia stands for Adobe Illustrator action file)*
- **apk files** *(Android Application package File (apk) is the file format used to distribute and install application software and middleware onto Google's Android operating system)*
- *how to import and export files from app inventor to our desktops)*

Day 5
Pre- Lunch
Creating own app.

About the Resource Persons:
Ms. Rashmi has a firm grip on the content of the training and presents it in a very fruitful manner. She has provided us with very detailed explanations. She has made mobile application, an interesting subject through the way she delivered the content. Also,

a lot of concrete examples were shown which made it very easy to understand. It has been a privilege to be apart of this training conducted by an award winning teacher. I believe that #teachersmatter

Mr. Maanas delivered the content in a very relevant and useful way. It was well presented in an intelligent and interesting manner. The material is interesting and clearly structured. Also, he possesses the highest level of knowledge on the subject and he has made his sessions very interesting.

Hawwa Abdul Raheem	**Day 1** It was a good experience, hoping to do better today with good connections, learnt MIT AI2 companion, AI2 starter,,Text To Speech,Speech Recogniser Emulator,Accelerometer Sensor etc **Day 2- Pre Lunch** Joined G+ Community Started Activity 4 Joined the dots Ball and Image Sprite **Day 2-Pre Lunch** OER **Day 3** Pet the Kitty Camera Say Cheese Camcorder Action Picture **Day 4** Formulator Tarsia Wordle **Day 5** OER commons Eclipse Crossword Formulator Tarsia Own app Aia file apk file **About the Resource Persons:**
Niumaath Shafeeg	Very informative and great learning opportunity. I learnt common terminologies used, learnt about app inventor, I learnt how to make an app to add speech, sensor, and speech recognizer. Despite internet challenge i learnt how to process. Looking forward to day 2 Day 2 Joined Google plus community Day 3 Today we created blocks for camera and camcorder Day 4 i saw some of the work of teachers online Day 5 Had to attend a meeting at MoE **About the Resource Persons:** Both the resource persons were clear, and took us through the programme very systematically

	'Mrs Rashmi's sessions were very interesting and interactive. Though i was not able to attend at all times, I was able to follow most of the work. She is clear and involves all participant. An expert in the field. Hope to work with this team in a near future.
Shuhudha Rizwan	**Day 1: Since I had t be away from the training rooom most of the time to arrange wifi for everyone, I wasn't able to concentrate much during the session. However, I was able to catch up with everything last night with the help of Arif and other colleagues. A big thank you to Arif :)** **Day 2: Before lunch, I first joined G+ and looked at the community 'Teachers' Matter'. After that I was able to complete the 2 projects discussed about in the session. I'm happy with my learning so far.**
Thohira Abdulla	**Day 1** **you have made me learn a lot as a result 3 apps i were able to complete.but still i struggle with the 3rd one.** **Day 2** **evening is my time to sit with the missed stuff of the previous day.while I work on those, my colleagues supported**
Ahmed Nizam	**Its really a great opportunity for me to participate the "Android Mobile Training".** **I have learn many ideas for making small applications.** **Day 1** **Dictation** **Text To Speech** **Speech Recogniser Emulator** **Accelerometer Sensor** **Day 2** **Activity 4 Joined the dots** **Ball and Image** **OER** **Day 3** **Joined G+ Community** **Pet the Kitty** **Say Cheese** **Camcorder Action Picture** **Day 4** **Understanding of OER** **Formulator Tarsia** **Wordle** **Its really very interesting training.**

	Now I am trying to make my own application. **About Resource Persons:** **Our two resource persons are really very good and capable. specially Madam Rashmi taught us very interesting applications. she is an expert to make mobile apps. but due to slow internet connection we are not able to complete some of the activities even though it is very interesting. we hope in near future we can get another training of developing mobile application with Rashmi Madam.**
Ali Rasheed	**Day 1:** **Discussion in Teachers' Forum** **Day Two:** **More familiar with the activities. Has to take Manas Sir to MOE for one hour.** **Trying to catch** **Day 3:** **I have to accompany Manas Sir to MOE for a meeting- missed greater part of session.** **Day 4:** **Got busy with office work. Missed sessions.** **Day 5** **Rasmi Kathuria's effective delivery used and the mode used was effective for the new learner's to grasp the new concepts.**
Shihab: Mohamed	**DTay 1 ra**ps inventor and also using code to access apps inventor. Learnt to make simple apps using apps inventor Learnt the importance of good internet connection for teaching and learning Blocks coding is useful for making apps Was able to create text to speech, accelerometer and speech recognizer app using app inventor Interesting session- But Slow Internet Connection….?? **Day2** Learnt to use google+ community Developed Canvas join the dots app using apps inventor. Unable to work due to slow internet connection. Ball Image Learn about OER –But Sir took more time on a bit far from topic – A bit boring **Day 3** Pet the kitty Camera Say cheese Camcorder Action picture Swat the mosquito- Interesting App

	Dice – not yet completed due to slow Connection Session is enjoyable In the afternoon we learnt about Creative Commons – good lesson-enjoyed in learning **Day 4** OER – Content Development in the Website– Informative session with practical's. Very useful session. Crossword Puzzle- Eclipse crossword- Creating Cross word puzzle (Offline) download. Activity creator - Formulator tarsi Wordle.net - for word info graphics Sharing Apps an interesting session teachers matter Day 5: