

## Criterion C: Project schedule

The following is the schedule that was used to develop the final product with Hamida.

Date	Action	Details	Comments and follow up	Date completed	Criterion
Nov. 2 2014	Retrieved contact information about the client, Hamida Bhimani.	Hamida's contact information was found from the IIC communications center.	I was able to email Hamida, Head of Electronic message board Ontario for the Ismaili Institute of Ontario (IIC), and ask her if she would like to implement a new system to the Al-Akhbar.	Nov. 4 2014	A
Nov. 15 2014	A list of possible implementations for the Al-Akhbar that I could design was created.	A powerpoint video, website, Android application, or specially designed flyer were the options.	I had extensive experience in Java, so an Android application implementation was chosen for the Al-Akhbar after doing some background Android OS research.	Nov. 24 2014	A
Dec. 15 2014	The purpose of the application was planned with Hamida so that I understand what features need to be coded/designed.	Hamida outlined the idea of the application: a client-server based application that updates the users on a weekly basis with news items.	It was clear the following were going to be some of the major components of the Al-Akhbar application: HTTP connection, database management, and news list organization.	Dec. 17 2014	A
Dec. 18 2014	My ITGS teacher, Ms. Gorski, approved the project.	I started to write criterion A of the project, outlining the main purpose of the application and introducing my client, Hamida Bhimani.	The idea of the Android application was complex enough to be considered as a valid ITGS project. The complexity checklist was checked through to make sure.	Dec. 19 2014	A
Dec. 22 2014	An extensive list of all the main features and requirements of the application were outlined with Hamida.	The 6 specifications for Criterion B of the product were developed. The application was to be designed around these principals.	The hardware, software, security, processing, IT system, and input/output specifications were determined for the design of the application.	Dec 26 2014	B
Dec. 26 2014	The Android application solution was compared and contrasted to other possible solutions.	Hamida agreed the Android application would be the best way to update users on a weekly basis.	Analysis and justification of why an Android application was chosen was written for Criterion B	Dec. 29 2014	B
Jan. 2 2015	A schedule that would work with Hamida and me was designed for the development of the application.	Deadlines were set for the blueprints, diagrams, and rough sketches of how the application will look.	Criterion C schedule was designed containing the important dates of the project.	Jan 2. 2015	C

Jan. 8 2015	Deadlines were discussed with ITGS teacher, Ms. Gorski, to ensure the application design timeline determined with Hamida would fit the project deadline.	The blueprints, diagrams, and rough sketches had to be done earlier so that there was enough time for testing before the project deadline.	I informed Hamida of the slight change in the schedule and she was able to adjust according to it. She wanted to test the application well and ensure it runs smoothly before sending it to the IIC.	Jan. 9 2015	C
Jan. 11 2015	Screen designs were made through draw.io software and shown to Hamida.	The graphical user interface of the application was open for me to design. Hamida liked the idea of tabs to separate different news items and loved the overall GUI. The red color scheme represented the IIC.	All screens were annotated and had a function. Pseudo code was explained to Hamida so that she understood exactly how the application would run to the user, and how the user would interact with it.	Jan 13 2015	D
Jan. 15 2014	Research on the Android and Java classes that would help create the services that the application is to offer was done.	UML class diagrams were designed, showing the important code needed to create each screen. The pseudo code was translated into workable classes.	The function of each screen was briefly explained to Hamida so that she gets an idea of how the application will work.	Jan. 18 2015	D
Jan. 20 2014	The news database was designed. Hamida gave me details of what each news item must have.	A table and ER diagram were created to show how one record in the online news database would look like.	Hamida explained all news must have a title, subtitle, body, and classification in the database.	Jan. 22 2015	D
Jan. 20 2014	Online hosting plans were presented to Hamida for running the database.	Right now, the database is hosted under my personal domain: zainzulfiqar.com.	Hamida has forwarded a host plan to the ICC. Until the IIC committee members approve the host plan, the database file is hosted on my personal domain.	Jan. 22 2015	D
Jan. 21 2015	Talking about hosting costs reminded Hamida of an additional specification of the application.	The application must be free to all users. It must be available free of charge and the users should be able to download it without any restrictions.	No cost was added as an additional requirement of the IT system in Criterion B.	Jan. 21 2015	B
Jan 22 2015	Coding the home screen of the application.	The Java code, and the XML GUI layout were completed.	Snapshots were sent to Hamida. Snapshots of the code were also taken for future reference in the Criterion E report.	Jan. 23 2015	E
Jan. 24 2015	Coding the individual tabs of the application	The Java code for switching between tabs, and the XML GUI layout for each tab was created.	All of the screens had been designed. So far, the user could switch between screens and view different types of news updates.	Jan. 26 2015.	E

Jan. 27 2015	The news items were coded. This was the most challenging part of the application design, and it took the longest.	A custom ListView adapter was coded to display the news items with a title and subtitle. The background thread to download the JSON database file from my domain was designed. Reading/writing buffer streams were designed.	News screens were finally populated. Internet connection had been established and the application was getting updated. The database on GoDaddy had 4 – 5 test records to see if the records were fetched properly by the application.	Feb. 3 2015	E
Feb. 4 2015	First testing of the application done by another ITGS student, Zayne Thawar, in my class. A test plan was constructed for feedback.	Errors were found in buttons, news loading, and internet connection database file downloading.	The cause of these errors was hard to determine. Specific lines of code for the application needed to be tested alone to determine where the problem occurred. Errors were fixed and the application was updated.	Feb. 10 2015	D
Feb. 10 2015	Additional if conditions were added to control internet connection scenarios.	Specific scenarios were coded: if internet connection = true & file does or does not exist, if internet connection = false but file exists, or if internet connection = false and file does not exist.	This change in code reduced the risk of the user crashing the application.	Feb. 13 2015.	E
Feb. 14 2015	Zayne Thawar once again tested my application. Test plan 2 was created.	Minor errors were found regarding the news database.	News items were not updating properly, and news records were not being inserted properly. Minor errors in buttons continued to exist between tabs.	Feb. 14 2015	D
Feb 15 2015	Errors were corrected. Application was updated	The errors in the tabs had been fixed. The Java code had been changed.	Hamida was informed about the progress of the application. Screen shots were sent to her.	Feb. 16 2015	D
Feb 17 2015	Katherine Lu tested the application one last time. The final test plan had been made.	This time, no errors were present in the application.	The application worked perfectly, and all the functions did their part.	Feb 17 2015	D
Feb. 20 2015	Once the final test plan was made, the specifications test plan was made for Hamida.	Hamida tested the application and filled out the test plan regarding the specifications.	Hamida confirmed all the specifications were met when testing the application. Her signature was retrieved to confirm she approves the application design.	Feb. 22 2015	D
Feb. 23 2015	Advanced features of the final application were analyzed for the Criterion E report.	Screenshots were annotated and the code was explained.	Justification was provided for why specific Java classes, and methods were used, and how that helped meet the specifications in Criterion B.	Feb. 25 2015	E

Feb. 27 2015	Once Hamida approved the application, the code for the application was packaged together.	Java and XML code was compiled into an installable Android application (.apk) file.	The application was signed under my name and validated through my Google Developer membership.	Mar. 1 2015	E
Mar. 2 2015	Vidcast was made for Criterion E.	Features of the Android application were displayed in a 5-minute video.	Annotations were added to make the video easier to understand.	Mar. 2 2015	E
Mar. 3 2015	The application was sent to Hamida to test and download on her own device.	The application worked perfectly on her device as well.	A phone interview with her was planned so that feedback could be gained about the project.	Mar. 5 2015	C
Mar. 6 2015	Hamida answered questions for the Criterion F questionnaire.	Her answers to the questions were noted down	Questions regarding the specification and the overall outcome of the application were asked.	Mar. 8 2015	F
Mar. 8 2015	A transcript of the interview was created.	The transcript was signed by Hamida to ensure the validity of the interview.	Through the feedback Hamida provided, it was evident she was really satisfied by the application and would like to take it further. Future ideas and improvements were talked about.	Mar. 9 2015	F
Mar. 10 2015	Complete Criterion G.	Name files, burn files onto CD/DVD, provide final product, cover page.	Completed and the format was checked by my ITGS teacher, Ms. Gorski.	Mar. 10 2015	G

## Gantt Chart

The following chart made through, SmartSheet Inc., outlines the development process of the application.

# Al-Akhbar Android Application







