

The slide displays a central interface titled "APM Rover" with the subtext "Powered by Java, Android, Python, C/C++". Below the title are several small windows representing different software components:

- NFC**: Describes NFC resolution.
- Serial**: Shows a terminal window with serial port data.
- Design Patterns**: Lists various design patterns.
- Network**: Shows a network configuration screen.
- File**: Displays a file browser interface.
- Database**: Shows a database management interface.
- More about OOP Books**: Provides links to books on Object-Oriented Programming.
- Networking & WiFi Settings**: Shows network configuration options.
- Algorithms**: Lists various algorithmic concepts.
- More about Android App Classes**: Provides links to resources on Android application classes.

At the bottom center is a "Thank You for Listening!" message with the subtext "Your feedback and suggestions are important to us!"

On the right side, there is a "Project Website" section with a house icon and a list of links:

- Home Project Description
- CodeIgniter - Details in GitHub (Sharing Default Page)
- Android - More details of the three mobile versions
- Android - More details of the three mobile versions
- Mobile - More details of the three mobile versions
- Mobile - More details of the three mobile versions

March 27. 15

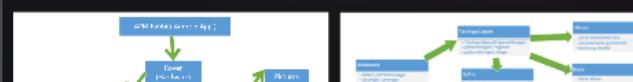
APM Rover

Presented By:
Sanvir
Himangi
Kenneth

Budget

Name of item	Description	Supplier	Part Number	Price	Quantity
Prezi	Software for presentation	Prezi	PREZI	\$100	1
Chair	Office chair	Amazon	CH-600	\$50	1
Table	Office desk	OfficeMax	DESK-100	\$200	1
Monitor	15 inch monitor	BestBuy	MONITOR-100	\$150	1
Keyboard	Logitech keyboard	Amazon	KEYBOARD-100	\$50	1
Mouse	Razer mouse	Amazon	MOUSE-100	\$30	1
Power Strip	3-prong power strip	Amazon	POWER-STRIP	\$20	1
Total				\$550	

Flow Chart & UML



Database



- Record locations
- using SQL
- Implementation



Prezi

APM Rover

Presented By: Somya Hemang Kenneth

Mail-27.11

Brief Introduction

- What is APM Rover?
- What does it do?
- How does it work?
- Why is it needed?
- What are its benefits?
- What are its limitations?
- What are its future plans?

Design of User Interface

The user interface is designed to be intuitive and easy to use. It features a clean, modern design with a light blue color scheme. The main screen displays a dashboard with various metrics and graphs. On the left side, there is a sidebar with navigation links. The overall layout is spacious and organized.

Settings

The settings page allows users to customize various aspects of the system. It includes sections for general settings, data source settings, and advanced settings. The interface is well-organized with clear labels and dropdown menus.

Courses Helped

This section lists various courses that have been helped by the system. It includes course names, descriptions, and links to the corresponding course pages.

Budget

The budget section provides a visual representation of the budget status. It includes a pie chart showing the distribution of funds and a bar chart showing the progress of different projects.

Flow Chart & Gantt

This section displays a flow chart and a Gantt chart. The flow chart shows the overall process flow, while the Gantt chart provides a detailed timeline for specific tasks.

Database

The database section shows the structure of the database. It includes a table of tables and a detailed description of each table's purpose and structure.

More about GIT Hub

This section provides information about the Git Hub feature. It includes details on how to access the hub, what kind of resources are available, and how to contribute to the hub.

Functionality of Gantt & Rover Settings

This section lists the functionality of the Gantt and Rover Settings. It includes features like 'Edit On Top Row', 'Save', 'Load', 'Delete', 'Copy', 'Paste', 'Import', 'Export', and 'Print'.

Algorithms

- Project Migration
- Connectivity of Rover with other software
- Work closely with Shakti, Program Evaluation and Review Technique (PERT) chart
- Ensuring flow of project's smooth operation
- Upgrading & Maintaining the Project
- Creation of basic structure of Robot and Rover

More about Android App Classes:

- APMRobot.java - Main Activity
- Config.java - Config file for Geotagging | Streaming | Default Page
- History.java - Setting of the Rover Machine | Speed, direction, mode
- Settings.java - Go Pro Settings such as color, exposure, orientation
- History.java | database In Progress

Project Website

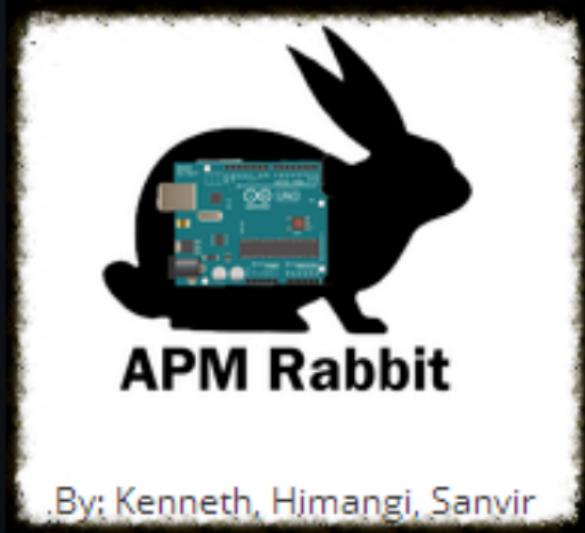
- Home | Project Description
- Download (Zip File, Documentation)
- Source Code
- 30 second Video
- Resources | References
- Grunt | Chart | Prior Art
- Feedback Section | Future Improvements

Thank You for listening!

Your feedback and suggestions are important to us!

Contents

- 30 sec video
- 1st Area: User Interface by Sanvir
 - Timeline of UI
 - Courses Helped in Development of UI
 - Individual Contribution
- 2nd Area: Database by Kenneth Hunter
 - Schedule | Timeline | Progress of DB
 - Courses Helped in Development of DB
 - Individual Contribution
- 3rd Area: Algorithms by Himangi
 - Schedule | Timeline | Progress of Alg
 - Courses Helped in Development of Alg
 - Individual Contribution
- 30 sec video



By: Kenneth, Himangi, Sanvir



Brief Introduction

Main Focus:

- Integrating Software capability to built in hardware(rover)
- Simple/Clear communication with users
- Interactive by adding GoPro Camera
- Perform live streaming
- Control thorough Android Application
- Record(Save) Locations
- Open Source

**Core Responsibilities -

- Database (Kenny)
- User Interface (Sanvir)
- Algorithms (Himangi)

** - subject to change(mentioned in beginning of semester)



Prezi

Budget

Name of Item:	Item Description:	Supplier:	Part Number:	Price:	Quantity:
APM 2.6 Set	The CPU/Control System of the Rover	3D Robotics	APT-KIT-0003	\$159.99	1
3DR uBlox GPS with Compass Kit	The GPS Unit of the Device	3D Robotics	GPS-KIT-0003	\$79.99	1
High Performace Ultasonic Range	Locates stuff around the rover	3D Robotics	ACP-BR-0011	\$39.95	2
Servo Extension Single Connection	A 3 prong cable for Servo	3D Robotics	CBL-CBL-0017	\$2.60	1
3DR Radio Set	A 915Mhz Radio Set for Reciver	3D Robotics	TEL-KIT-0004	\$100	1
1/16 4AWD Racing Buggy	The R/C Buggy	HobbyKing	17952	\$74.99	1
Turnigy E3 Compact 2S Charger	Charger for RC Car	HobbyKing	49338	\$12.35	1
Turnigy 1300mAh 2S Battery Pack	Battery Pack for RC Car	HobbyKing	15087	\$7.51	1
Turnigy 9X 9Ch Transmitter	Remote for RC	HobbyKing	8992	\$59.99	1
GoPRO Hero 4 Silver	Video camera for the front of Rover	GoPro Inc	GoPro Hero 4 Silver	\$399.99	1
		Shipping:		\$111.03	
		Total:		\$1,184.31	

Design of User Interface

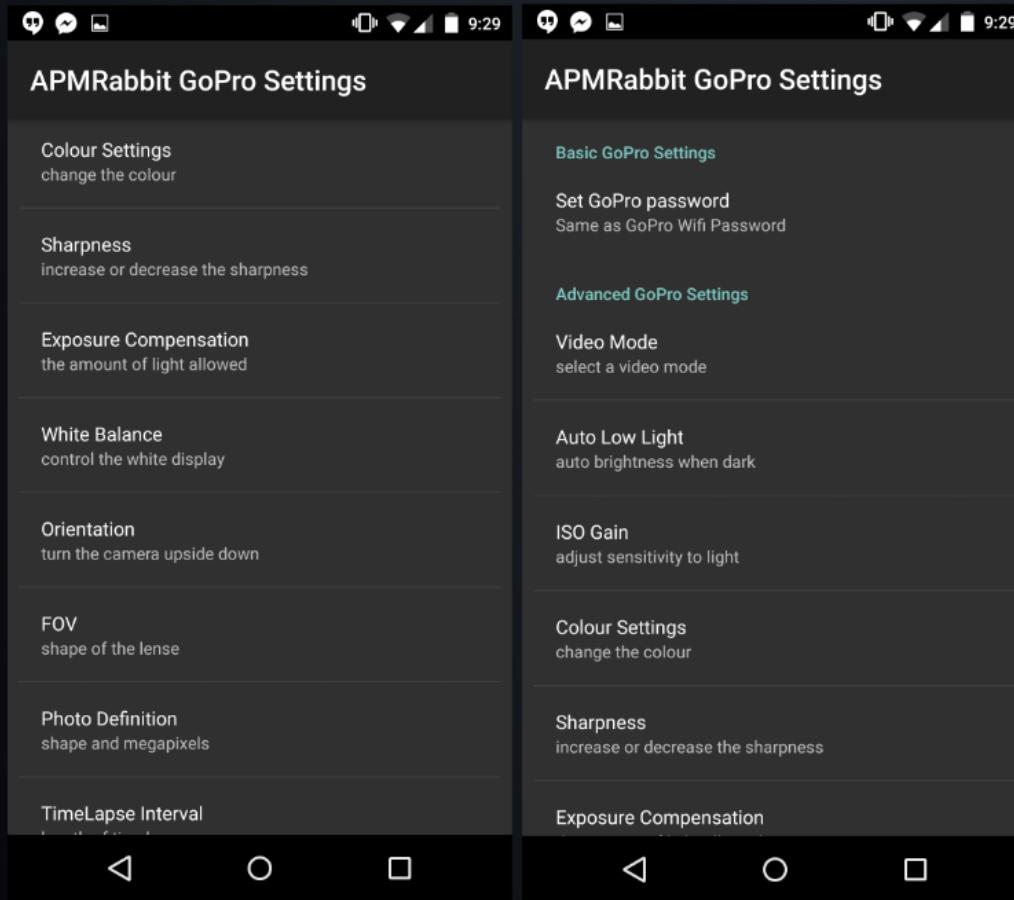
1. Rabbit Eye(Android Application)

- API level 17
- User friendly
- Tabs (GoPro, Rover, Settings, History)
- Full control to user by playing with settings
- First Person View added in App with special features such as live viewing, start/stop recording, take a picture, burst, time lapse.

2. Website

- Brief Introduction
- Capability to live stream
- 30 second video(will be up soon)
- Link to GIT Hub
- Link to download help manual
- Brief instructions of HOW TO USE RABBIT

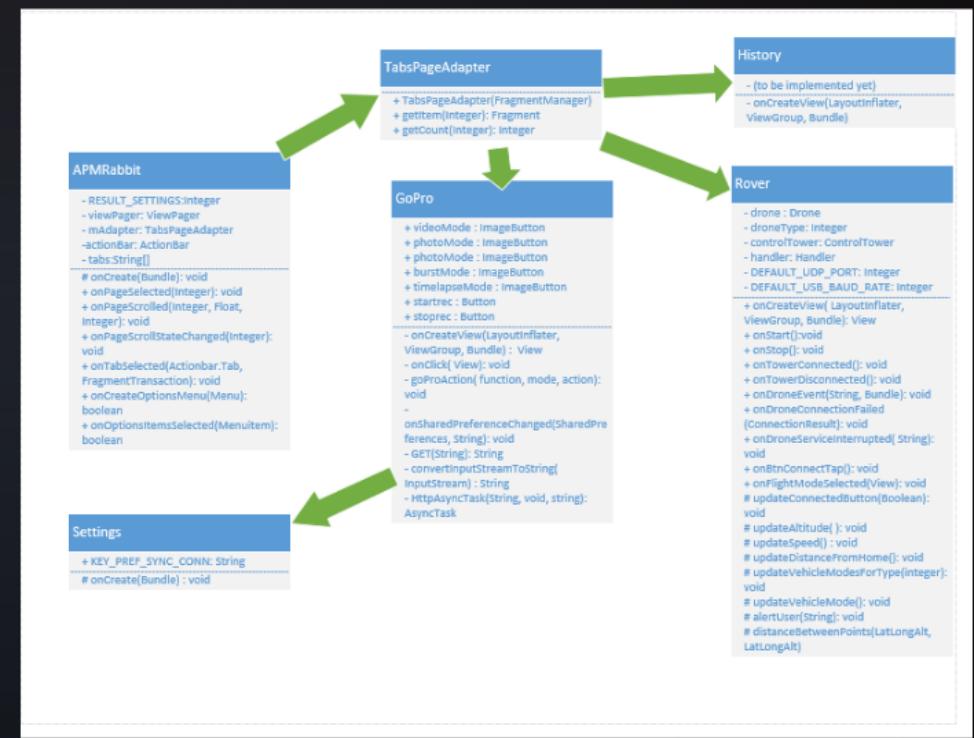
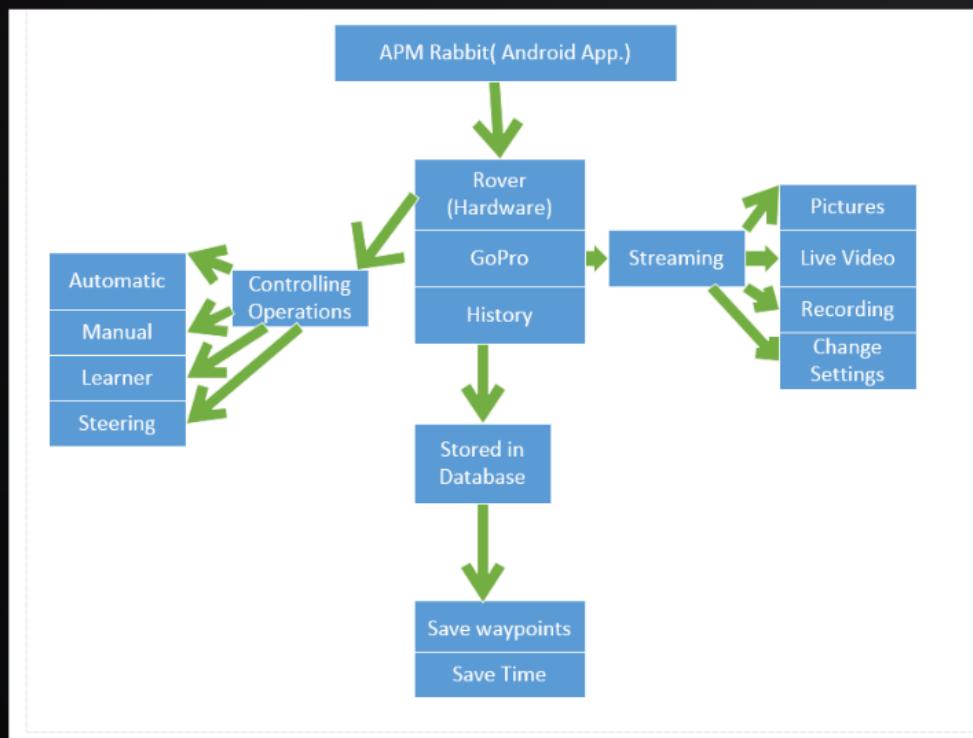
Settings



<https://github.com/HunterIT/APMRabbit/blob/master/Android/app/src/main/java/com/hunterit/APMRabbit/Settings.java>

<https://github.com/HunterIT/APMRabbit/blob/master/Android/app/src/main/res/xml/preferences.xml>

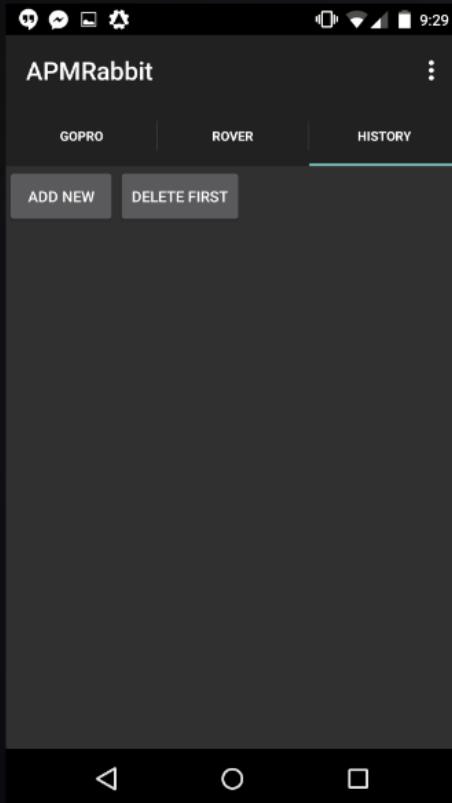
Flow Chart & UML



Courses Helped

- CENG 317 - Hardware Production technology
- CENG 319 -Software Project
- CENG 212 - Programming Techniques in Java
- CENG 254 - Database with Java
- CENG 216 - System Analysis
- WRIT220 - Technical Workplace Writing Skills

Database



- Record locations and save it
- using SQL
- Implementation in progress
- user will be able to add address of new location
- user will be able to delete exiting location
- Access through RECORD tab in RabbitEye
- Future plan - record time when moved

More about GIT Hub

- Easy Access
- Link added of main project website
- Open source
- Android/ Website source codes available
- Brief Instructions of Project (sublinks added)
- Documentation Manual link

Functionality of GoPro & Rover Settings

- Video Resolution
- Auto Low Light
- Color Settings
- Sharpness
- Exposure Compensation
- Video Protune
- White Balance
- Turn On/ Off Rover
- Speed
- Mode
- Direction
- Turns/ Angles
- Timer

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Algorithms

- Project Navigation
- Connectivity of Rover with software
- Work closely with Structure , Program Execution, and Project Website
- Ensuring flow of project in smooth pace
- Providing ideas/ resources for Graphical UI and Database
- Updation of Project Website
- Creation of basic structure of Rabbit eye(Classes)

More about Android App Classes:

- APMRabbit.java - Main Activity
- GoPro.java - First tab ie GoPro | Streaming | Default Page
- Rover.java - Setting of the Rover Machine i.e speed, direction, mode
- Settings.java - Go Pro Settings such as color, exposure, orientation
- History.java (database In Progress)



Project Website

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