Computer Graphics on Mobile Devices

VL SS2010 3.0 ECTS

Peter Rautek
Google Code (Advanced)
GestureDetector/TouchListener
Zwischengespräch
Q&A
Gruppenvorstellung
CodingSession
GoogleCode

- Project Feeds
- Wiki
- Issue Tracker
- Search for Android OpenGL
  - We are on page 4 (#33)
  - Related Projects
    - E.g., Replica Island
### Statistics - I’m watching you ;)

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- **Statistics (13.4.2010 14:00):** [http://www.cg.tuwien.ac.at/courses/CGMD/stats/2010/FAQ01/](http://www.cg.tuwien.ac.at/courses/CGMD/stats/2010/FAQ01/)
- **Level review:** [http://www.youtube.com/watch?v=gGLMgoTJ9a4](http://www.youtube.com/watch?v=gGLMgoTJ9a4)
private OnTouchListener touchListener = new OnTouchListener()
{
    public boolean onTouch(View v, MotionEvent e)
    {
        //pass on the touch event to the GestureDetector
        boolean b = cGestureDetector.onTouchEvent(e);
        try {
            //this hack prevents the frame rate from dropping dramatically during interaction.
            //described at:
            //http://groups.google.com/group/android-developers/browse_frm/thread/39eea4d7f6e6dfca
            Thread.sleep(35);
        } catch (InterruptedException e1) {
            e1.printStackTrace();
        }
        return b;
    }
};

private OnGestureListener gestureListener = new OnGestureListener() {
    //TODO implement OnGestureListener here
};

GestureDetector cGestureDetector = null;
//init the activity
void initialization(){
    myGlsSurfaceView.setOnTouchListener(touchListener);
    cGestureDetector = new GestureDetector(gestureListener);
}
Until Next Week (Zwischengespräch)

- Full functional (playable) level!
- Other requirements
  - Screen resolution
  - Localization
  - Android versions
  - Hardware
  - JavaDoc
- VisLab
- Everybody should know the time slot!?
Fragen?

- ???
- ???
- ???
- ???
Overview

- Google Code (Advanced)
- GestureDetector/TouchListener
- Zwischengespräch
- Q&A
- Gruppenvorstellung
- CodingSession
- Distribute treasure among people
- Drop treasure
- People start fighting when too close
  - Prevent that!
Banks overcame the financial crisis
  ◆ Bonuses for the bunny

Stop the men with the money bags
  ◆ Install spring guns
Depressions due to his richness
- Bunny goes on a bender

Drink as much beer as possible 😊

Beer in a labyrinth

Keep away from wife, prostitute, police

More beer => boozed
L17: Wuahhh! h!!1

- Base jumping
- Get penalties
  - Too near to buildings
  - Birds killed
- Game finished
  - Crashed into building
  - All money spent
N/A
L22: Mailbomber

- Spam mails
- Mails get closer to the user
  - Terms in L33t speak
  - Type while the mail is visible
- Get rich-mails
  - Type in L33t speak
- Get viagra-mails
  - Translate to English
  - Lose money
L23: PimpStyle Airways

- Go for a ride in a hot-air balloon
- More gold burned => faster balloon
  - Rabbit virgins are waiting 😊
- Cover long distance in as little time as possible
- Dodge the obstacles
L30: Stockmarket Loser

- Lose money
  - Buy and sell company shares
- Graphs (stock prices) fly towards you (3D)
- Buy when price is high
- Sell when price is low
L33: Das geheimnisvolle Labyrinth

- Escape with a treasure in a labyrinth
- Drop gold at adequate places
- Certain objects
  - Treasure
  - Treasure map
  - Stone
  - Cask
  - Fountain
L36: Rubbel dich arm

- Compulsive gambling
- Maximal 10 lottery scratch tickets
- Ticket costs money
- Negative winnings
L42: Signanzorbit

- Signanzeffect
  - Small objects in orbits around the treasure
- Destroy the gold planet
- Throw satellites from their orbits on the treasure
- Use directed forces to affect the orbits
- Satellites have to be hit on correct position with correct force => maximal damage
Rabbit learned to fly from a shaman
- Costs money
- Rabbit got too much change

Shaman tries to kill the rabbit with a gun

After short time
- Rabbit wants to give the money back
- Tries to get hit as much as possible
  - Money lost
L50: Mal andersrum

- Intro video
  - Remember the coins
- Put coins at the correct places (video!)
- Get stuck => ways and means to get ahead or back
Jump ‘n’ Run Level
Fill the empty level with coins
Be as fast as possible
L60: Rabbit Rampage

- Find crime weapons
- Destroy everything
- Try to get as much penalties as possible
N/A
L70: Careful Buddys

- Money is at a Swiss bank account
  - High-interest
- Transport money with a train
  - Get rid of waggons by disconnecting
  - Employee trains try to save the waggons
  - Control employee trains by shunting switches
L77: Bunny Block

- Drag valuable blocks
- 3 blocks in a row cancel each other out
  - Gold lost for recreation
- Try to cancel as many blocks as possible
- Items above fall down
  - Possible bonus points
L83: Lenny Must Die - Arcade

- Fight for bunny happiness by being a super ingenious gaming machine
- Lenny played by bunny
- Kill Lenny by deadly items
- Lenny dies => Bunny inserts more coins
L84: Ich werfe meine Juwelen in d. Kanal

- Walk along a street
- Throw gems into the drain
  - Different drain sizes
  - Align the gems
Bunny = bank robber

Hide as much gold as possible
- Different sizes of hide-outs
- Hide-out large => more difficult to reach

Police catch you => Game over

Different game events
- Garage
- Road blocks
- …
L99: Challenge the time

- Try to keep the gold powder as long as you can!
Overview

- Google Code (Advanced)
- GestureDetector/TouchListener
- Zwischengespräch
- Q&A
- Gruppenvorstellung
- CodingSession
Coding Session

Goals:
- Identify problems
- Summarize problems
- Find someone to help you

No problems? We can make some!
- Try it on NexusOne (Android 2.1)
  - Orientation changes
- Try it on G1 (Android 1.6)
  - Flip out keyboard

Try
- Internationalization
- Screen resolution
- Life cycle
  - Press phone (green) button
  - Press back button
  - Check if your level still runs
  - Press home button
  - Long press home button and select bifth
  - Check if your level still runs

Peter Rautek