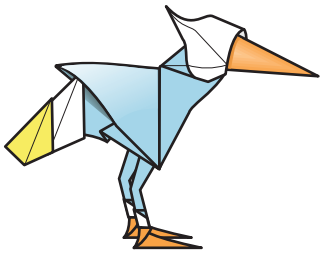
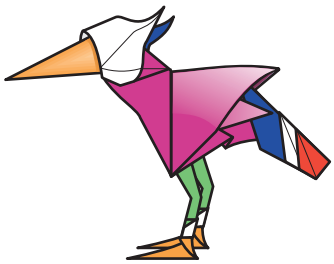


Multilayers Bird



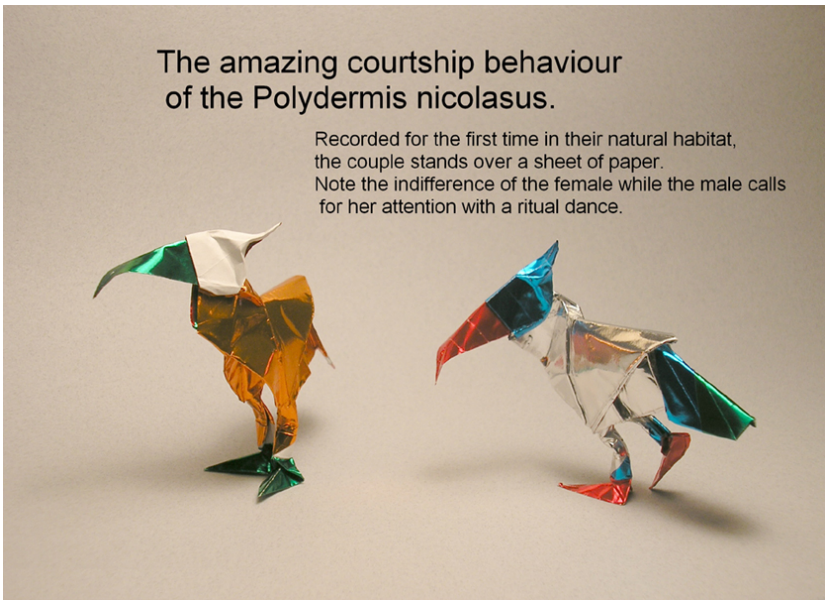
Dedicated to my Grand-mother
who teach me the Bird Base.

Creation & Diagram : Nicolas TERRY **http://www.passionorigami.com**

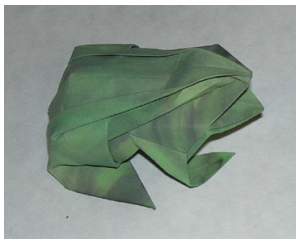
- Création # 46 / Date : 08/2004
- 30 min
- Level : Simple
- Dimension (R= 0,35) :
  A 20 cm square makes a 7 by 4 cm model.

Paper :
- ☑ Standard paper
- ☑ Tissue-foil
- ☑ Wet folding

I got to work on the multilayers concept because I wanted to add many colours to my models. Using one sheet of paper brings of course 2 colours, one on each face. To have more colours, we can :
- Paint part of the paper, or paint the finished model
- Assemble many papers of differents colours : this is the modular concept.
I didn't want to go either of these ways. I then imagined to superimpose two squares to obtain only one square with two layers. We can then regard this new square as a single square and keep all the rules and traditional techniques of origami. What is interesting is the fact that this approach generates some new challenges. Indeed, we must now work on how we can expose the various colours (there are 4 with 2 sheets) and manage the layers during the design and the folding sequence.
With this bird, you can discover a multi-layers example of design using the classic bird base. Obviously, by adding sheets, you multiply the colours and the possibilities. See also an other example with the toad by Román Díaz.



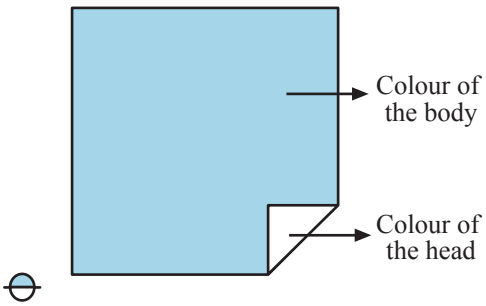
Text, folder and photographer : Román Díaz

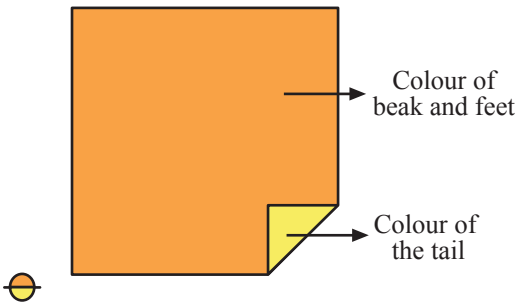


Original Model : Toad by Román Díaz

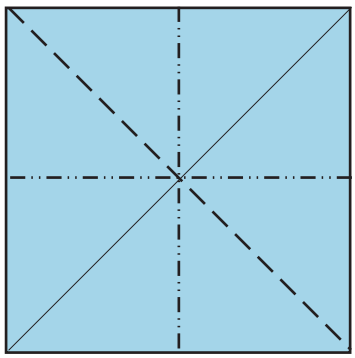
Multilayer Barcelona Toad
by Nicolas Terry

Choose two squares with four different colours.

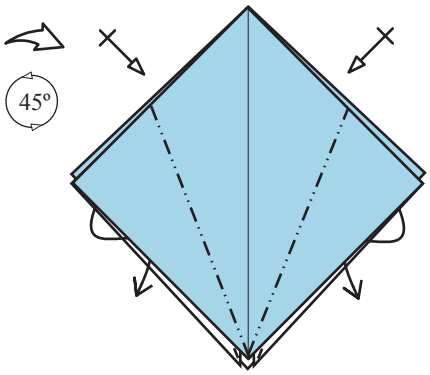




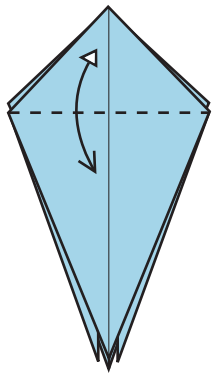
The multilayers concept [ou *Multilayering*] *consists in folding the two squares as if they were only one. However, for an easier start, it is recommended to precrease each square before superimposing them.*



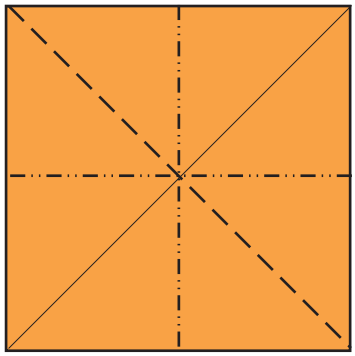
1. *Fold a preliminary base.*



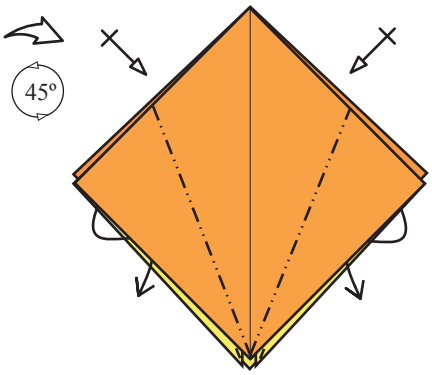
2. *Four reverse folds.*



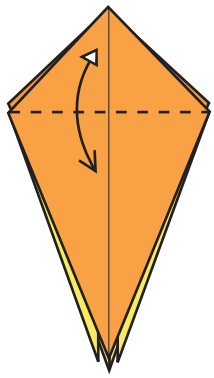
3. *Fold and unfold. Then unfold the bird base completely.*



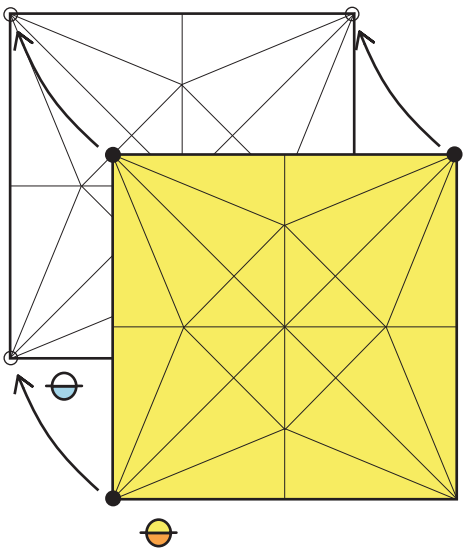
4. *Fold a preliminary base.*



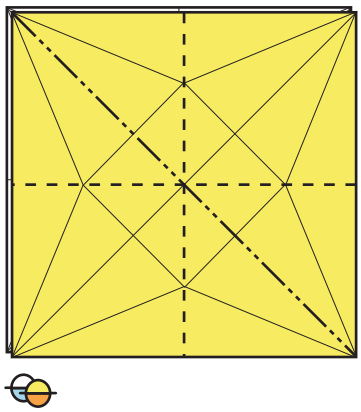
5. *Four reverse folds.*



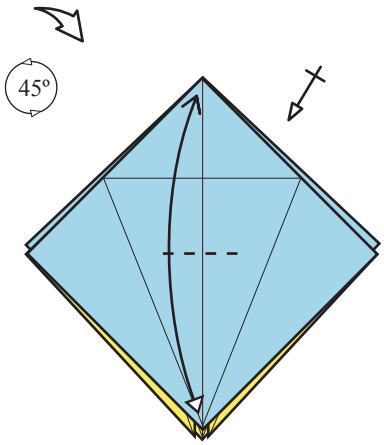
6. *Fold and unfold. Then unfold the bird base completely.*



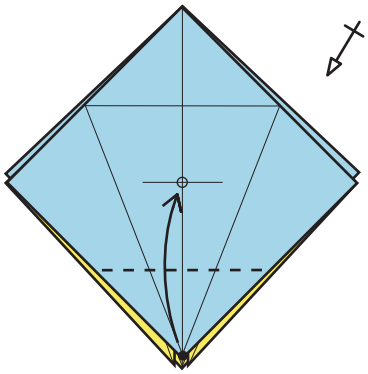
7. *Superimpose the two squares while taking great care of colour positioning: place the colour of the body underneath and the colour of the tail on top.*



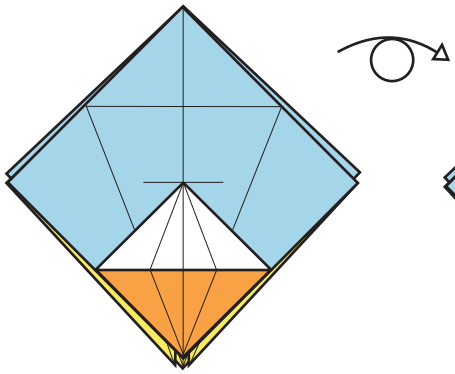
8. *Fold the two squares together to get the preliminary base.*



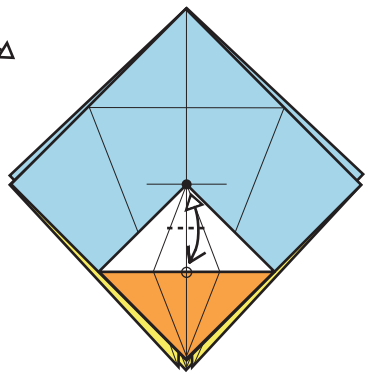
9. *Fold the front layer to the top and pinch only at the middle. Then unfold. Repeat behind.*



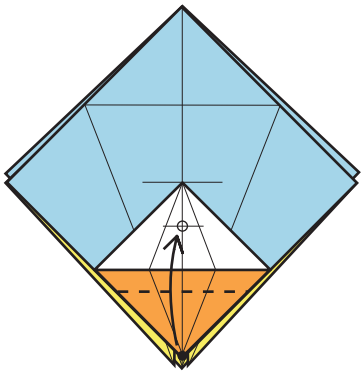
10. *Fold only the front layer to the centre. Repeat behind*



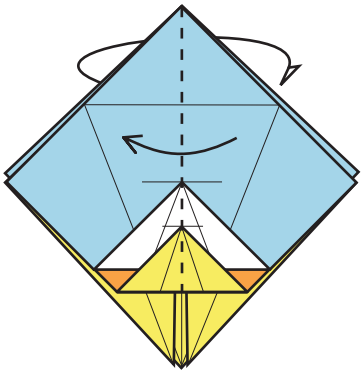
11. *We can see the second layer now.*



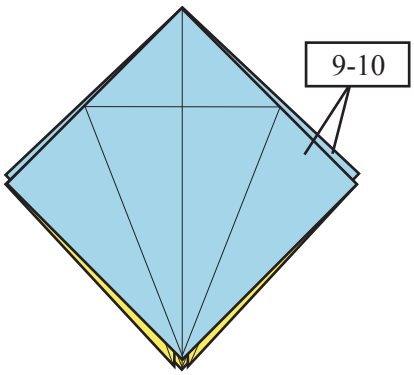
12. *Fold and pinch at the middle. Then unfold.*



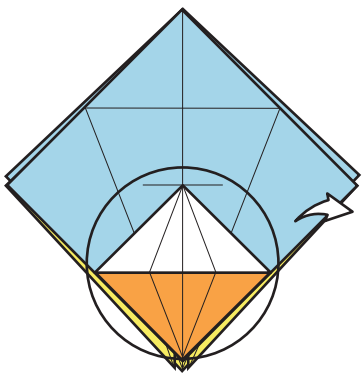
13. *Fold the second layer to the mark done in step 12.*



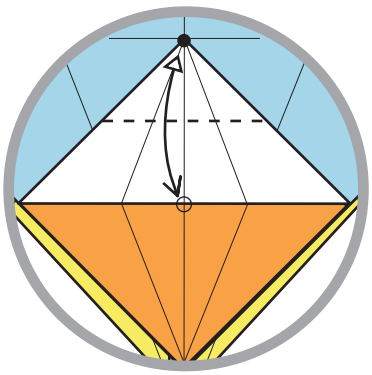
14. *The tail is done. Fold now the front flap in half to the left and the back flap to the right.*



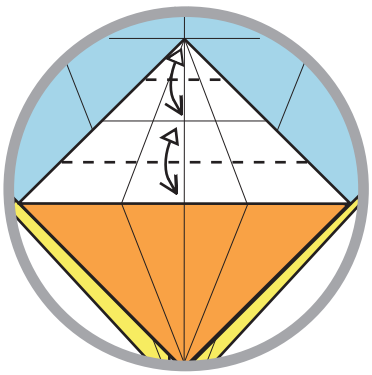
15. *Repeat steps 9 and 10 on the front & back layers.*



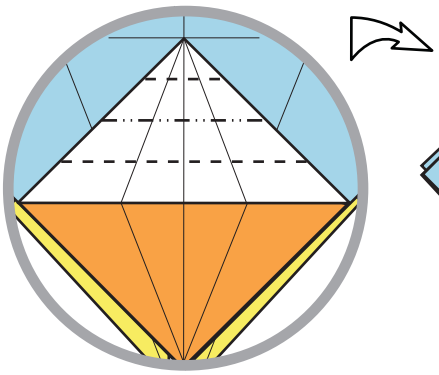
16. *Focus on this part.*



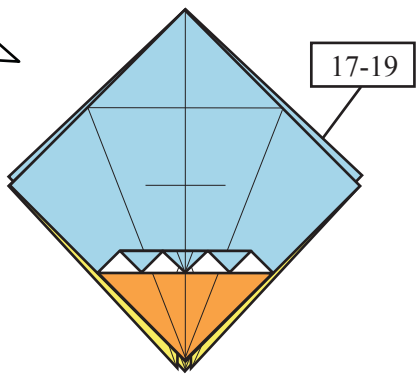
17.*Fold and unfold.*



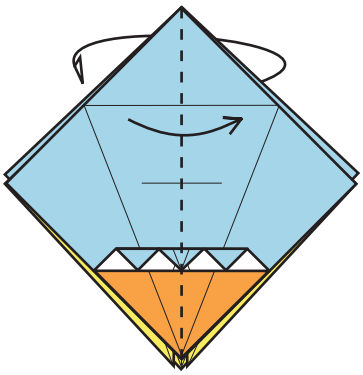
18. *Fold and unfold.*



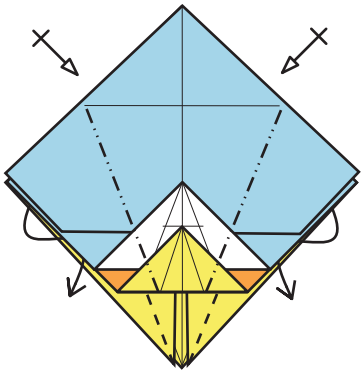
19. *Pleat-folds.*



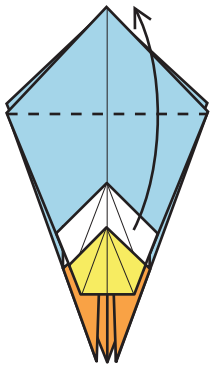
20. *Repeat steps 17 to 19 behind.*



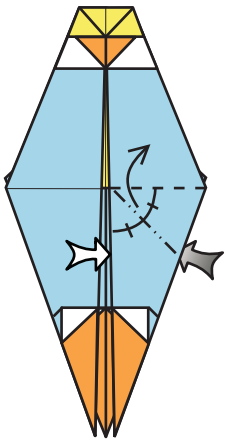
21. *Fold now the front flap in half to the right and the flap behind to the left.*



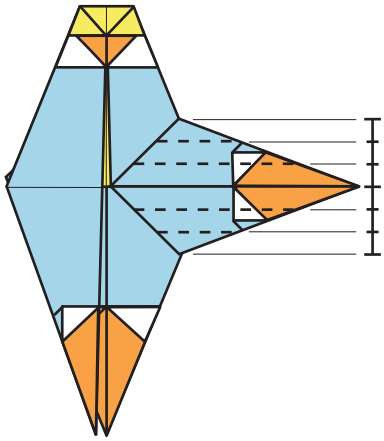
22. *Four reverse folds through all the layers to re-fold the bird base.*



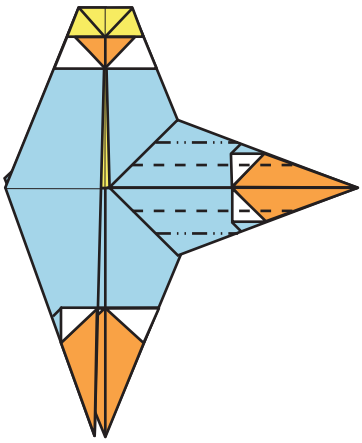
23. *Valley-fold the tail upwards.*



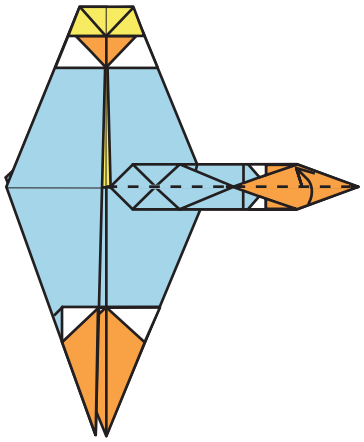
24. *Squash-fold.along angle bisector*



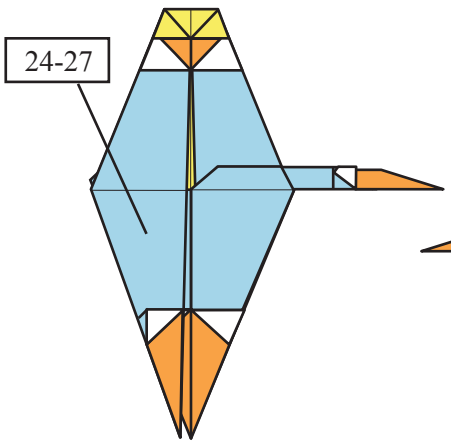
25. *Fold in thirds each flap.Unfold.*



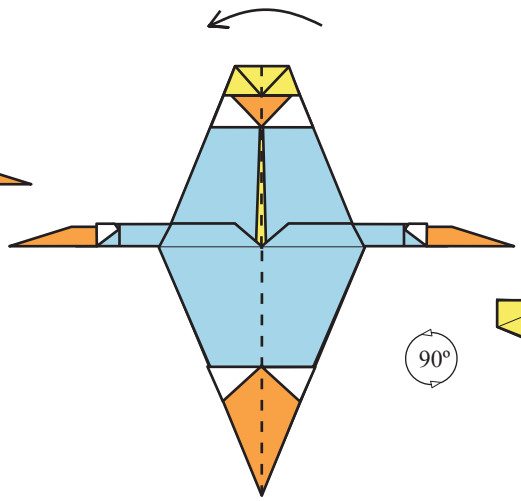
26. *Pleat-fold each flap to thin the leg.*



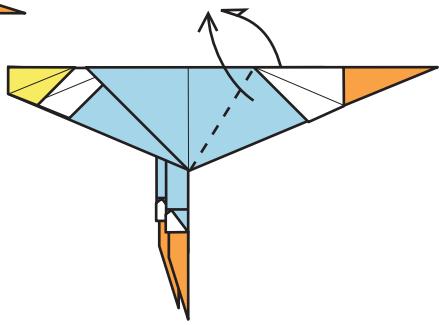
27. *Valley-fold the leg to the top.*



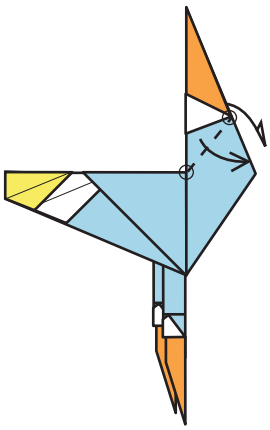
28. *Repeat steps 24 and 27 on the left.*



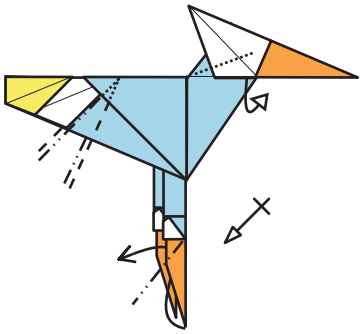
29. *Fold the model in half to the left.*



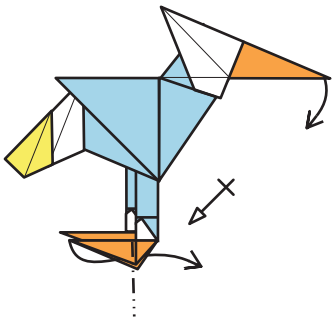
30. *Outside reverse-fold for the neck*



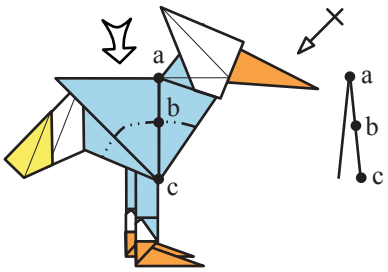
31. *Outside reverse-fold.*



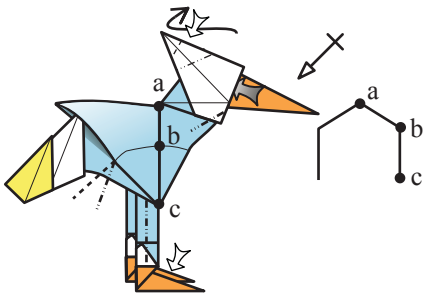
32. *Reverse-fold the legs and crimp-fold the tail. Pull out the hidden flap for each side of the head.*



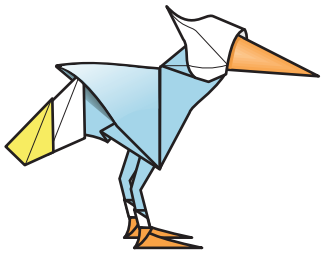
33. *Reverse-fold again the legs and pull down the beak.*



34. *Mountain-fold firmly through all the layers and round the body. This fold is important because it locks the pleat-fold of the legs and gives the body its 3D shape. The line figure on the right side shows a cut view of the body.*



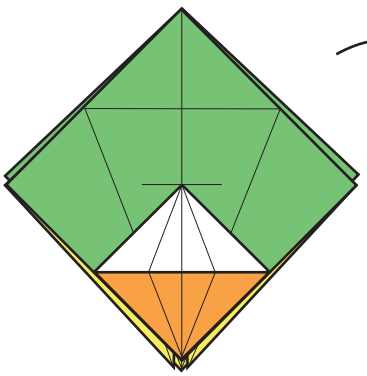
35. *Pleat-folds near the tail to lock the body shape.Thin the legs and flatten the feet. Crimp-fold the crest. Mountain-fold the corners and round the head. Shape the body to taste..*



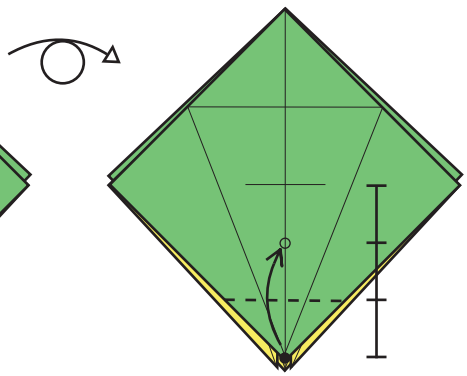
36. *Bird completed*

Multilayer Wader

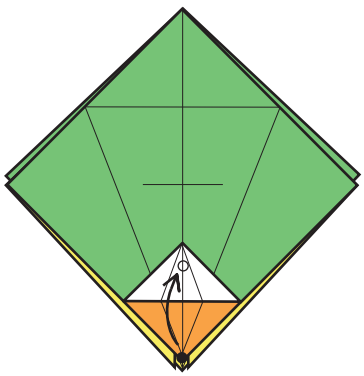
With the multilayers concept, we can have many variations. Here a example where with a small variation in the initial folding sequence, we can create wings and the legs have only one color. Use the begining of the diagram above and include this following changes:



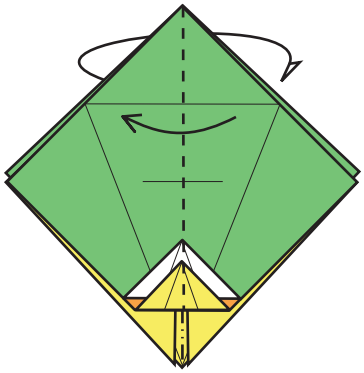
a. *Fold the steps 1 to 11 of the bird. Turn over the model.*



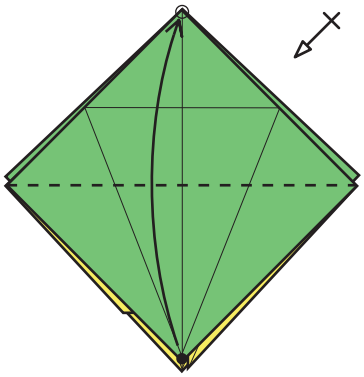
b. *Fold only the front layer to the centre.*



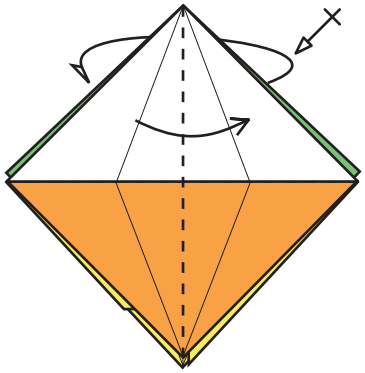
c. *Fold the second layer.*



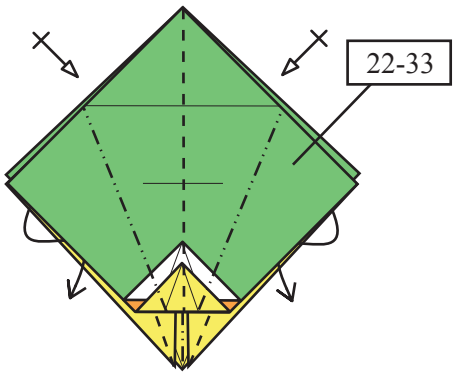
d. *Fold now the front flap in half to the left and the flap behind to the right.*



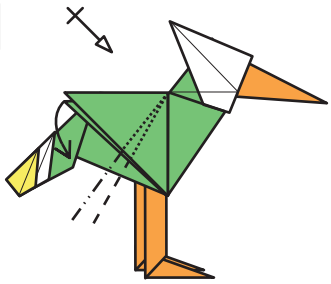
e. *Valley-fold the front flap upwards. Repeat behind.*



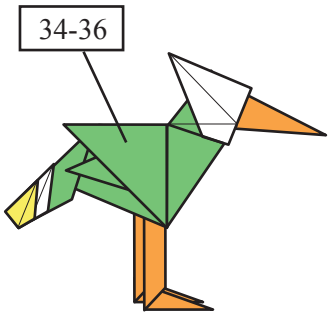
f. *Fold now the front flap in half to the left and the flap behind to the right.*



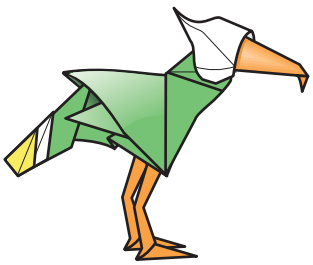
g. *Continue now with the steps 22 to 33 of the bird.*



h. *You should get this. Pull out the hidden wings with a pleat-fold inside.*

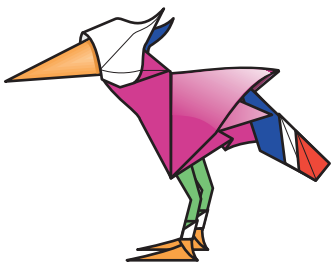


i. *Continue now with the steps 34 to 36 of the bird.*



J. *Wader completed.*

Others variations



<u>Challenge</u> : Add a third layer now and let guide itself by your imagination to create new birds more coloured even. For example, mix the folding sequences of the first bird and the wader to obtain this new bird. But there is many other possible variations …

You can make tissue-foil to obtain the colours you wish.: